

***United States Court of Appeals
for the Second Circuit***



APPENDIX

77-7089

ORIGINAL

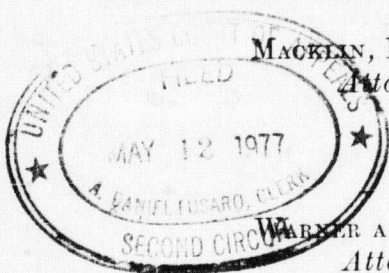
IN THE
United States Court of Appeals
For the Second Circuit.

THE CONTINENTAL INSURANCE COMPANY,
Plaintiff-Appellant,
against

HERSENT OFFSHORE, Inc.,
Defendant-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE SOUTHERN DISTRICT OF NEW YORK.

JOINT APPENDIX.



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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK.

THE CONTINENTAL INSURANCE COMPANY,

Plaintiff,

against

HERSENT OFFSHORE, Inc.,

Defendant.

73 Civ. 1158 (GLG)

Relevant Docket Entries in the Proceeding Below.

Date	Entry
1973	
Mar. 19	Filed complaint and issued summons.
Apr. 25	Filed answer to complaint.
May 3	Filed answer to counterclaim.
1974	
Jan. 18	Filed defendant's amended answer.
Jan. 16	Filed plaintiff's answer to amended counterclaim.
1975	
Aug. 8	Filed order of substitution of attorneys for defendant.
1976	
Jan. 26	Filed Pre-Trial Order (Tenney, J.).

Relevant Docket Entries in the Proceeding Below

Date	Entry
Apr. 29	Notice of reassignment to Judge Haight.
July 8	Notice of reassignment to Judge Goettel.
Oct. 12	Non-jury trial begun before Judge Goettel.
Oct. 18	Trial concluded; court finds for defendant on counterclaim.
Dec. 10	Filed order referring case to Magistrate Raby for conducting inquest on damages.
1977	
Jan. 6	Filed Findings of Fact and Conclusions of Law (Continental is liable to Hersent for losses covered by the Hull Policy only).
Jan. 18	Filed plaintiff's motion for an order directing that the Findings of Fact and Conclusions of Law and order (and any judgment entered thereon) be amended so that judgment be entered in favor of plaintiff rather than defendant.
Jan. 19	Filed Interlocutory Judgment and Order (Continental's action for a declaratory judgment denied on the merits; Continental liable to Hersent for losses covered by Hull Policy; action of Hersent for recovery under Protection and Indemnity Policy denied on the merits).
Jan. 20	Judgment entered.
Feb. 7	Filed memo. endorsed on motion filed Jan. 18, 1977 (motion denied).
Feb. 14	Filed plaintiff's Notice of Appeal from Interlocutory Judgment entered on Jan. 20, 1977; and from order entered Feb. 7, 1977. Filed undertaking for costs on appeal.

Complaint.

(Document No. 1)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

This is a cause of admiralty and maritime jurisdiction and is an admiralty or maritime claim within the meaning of Rule 9(h) of the FRCP.

The Complaint of The Continental Insurance Company against Hersent Offshore, Inc. respectfully alleges:

FIRST: That the plaintiff, The Continental Insurance Company, at all times hereinafter mentioned was a corporation duly organized and existing under and by virtue of the laws of the State of New York, for the purpose of conducting the business of insurance. The principal office of the plaintiff is within the State, City and County of New York.

SECOND: That the defendant, Hersent Offshore, Inc., is a corporation duly organized and existing under and by virtue of the laws of a foreign jurisdiction, for the purpose of conducting offshore construction work. The defendant maintains an office at 29 Broadway, New York, N. Y.

THIRD: That this is an action for declaratory judgment and for such further and supplemental relief as hereinafter appears, brought pursuant to the terms and provisions of a certain statute of the United States, 28 USC §2201, commonly known as the Federal Declaratory Judgment Act, for the purpose of determining the actual controversy between the parties, as shall appear more fully hereinafter.

Complaint

FOURTH: That, upon the application of defendant then known as Delong of New York, Inc., and on July 24, 1972 a certain policy of insurance was issued by the plaintiff, The Continental Insurance Company, bearing No. HC 01 27 81. A copy of this policy is annexed hereto and marked Exhibit A and made a part hereof by this reference.

FIFTH: That pursuant to the policy of insurance referred to above and attached hereto as Exhibit A, which is known as a Hull Policy, the plaintiff The Continental Insurance Company agreed pursuant to the terms and conditions of the policy and the representations made with respect thereto, to insure the barge Hughes No. 136 for the sum of \$65,000.00, the Crawler Crane Model Manitowoc Model #4100W for the sum of \$300,000.00 and Miscellaneous Equipment located on the barge Hughes No. 136 for the sum of \$71,000.00, all in the amount of \$436,000.00.

SIXTH: That by Endorsement #5 dated October 26, 1972 the name of the insured was amended to read Hersent Offshore, Inc.

SEVENTH: That pursuant to the policy of insurance referred to above and attached hereto as Exhibit A, the defendant Hersent Offshore, Inc. warranted to do certain acts set forth in the "Storm and Heavy Weather Plan" clause of the aforementioned policy.

EIGHTH: That on or about December 17, 1972 the barge Hughes No. 136 capsized, causing damage and loss to the barge Hughes No. 136, the Crawler Crane Model Manitowoc Model #4100W and the Miscellaneous Equipment located on the barge Hughes No. 136.

NINTH: That following the capsizing of the barge Hughes No. 136 on or about December 17, 1972, the defendant made claim upon the plaintiff herein pursuant to plaintiff's policy of insurance numbered HC 01 27 81 for

Complaint

the damages and losses to the barge Hughes No. 136, the Crawler Crane Model Manitowoc and the Miscellaneous Equipment arising out of the aforementioned capsizing.

TENTH: That the plaintiff does not believe it is obligated to compensate the defendant for the aforementioned losses pursuant to the terms and conditions of its policy No. HC 01 27 81, and has accordingly denied the claim.

ELEVENTH: That upon information and belief the plaintiff alleges that the defendant breached the warranties made by it in the clause of the policy known as the "Storm and Heavy Weather Plan".

TWELFTH: That by reason of the defendant's breach of the warranties in the policy, the plaintiff is not obligated to compensate the defendant for the losses arising out of the capsizing of the barge Hughes No. 136 on or about December 17, 1972.

WHEREFORE, plaintiff demands that this court make a judgment declaring and setting forth the rights under the respective insurance policy as between the parties to this suit and that this court determine, set forth and declare that the plaintiff The Continental Insurance Company, by reason of the breach of the warranties by the defendant Hersent Offshore, Inc., is not obligated by the terms of its policy of insurance to compensate the defendant for any and all claims arising out of the capsizing of the barge Hughes No. 136 on or about December 17, 1972, and for such other and further relief as in the interest of justice this court may deem appropriate.

Amended Answer and Counterclaims.

(Document No. 15)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

Defendant, by its attorneys, Hynes & Diamond, amending its answer to the complaint herein, states as follows:

1. It denies having knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs First and Third of the Complaint.

2. It admits that it is a corporation duly organized and existing under and by virtue of the laws of the State of New York, one of the lawful corporate purposes of which is the conducting of offshore construction work. Except as so admitted, defendant denies each and every other allegation contained in paragraph Second of the Complaint.

3. It admits each and every allegation contained in paragraphs Fourth, Eighth and Ninth of the Complaint.

4. It denies having knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs Fifth, Sixth and Seventh of the complaint; and leaves to the Court the interpretation of the terms and provisions of the policy of insurance.

5. It admits that plaintiff denied defendant's claim under the insurance policy. Except so as admitted, it denies having knowledge or information sufficient to form a belief as to each and every other allegation contained in paragraph Tenth of the Complaint.

6. It denies each and every allegation contained in paragraph Eleventh and Twelfth of the Complaint.

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Amended Answer and Counterclaims

AS AND FOR A FIRST AFFIRMATIVE DEFENSE:

7. The Complaint fails to state a claim against defendant on which relief can be granted.

AS AND FOR A SECOND AFFIRMATIVE DEFENSE:

8. Defendant did not breach the warranties allegedly made in the clause of the insurance policy known as "Storm and Heavy Weather Plan." Consequently, plaintiff is obligated to compensate the defendant for the losses referred to in the Complaint.

AS AND FOR A THIRD AFFIRMATIVE DEFENSE AND A COUNTERCLAIM AGAINST THE PLAINTIFF, THE DEFENDANT ALLEGES AS FOLLOWS:

9. At all pertinent times defendant was and still is a corporation duly organized and existing under and by virtue of the laws of the State of New York.

10. At all pertinent times, upon information and belief, the plaintiff was a corporation duly organized and existing under and by virtue of the laws of the State of New York.

11. That on or about July 24, 1972, the plaintiff issued to defendant a certain policy of insurance bearing number HC 01 27 81, a copy of which is annexed hereto and made a part hereof.

12. That on or about December 17, 1972, the barge Hughes No. 136 capsized, causing damage and loss to the barge Hughes No. 136, the Crawler Crane Model Maintowoc Model #4100W and the Miscellaneous Equipment located on the barge Hughes No. 136.

13. All conditions precedent have been performed or have occurred.

Amended Answer and Counterclaims

14. That as a result of the foregoing, the plaintiff is obligated to compensate the defendant for the aforesaid loss, which is, upon information and belief, estimated to be approximately \$500,000.00.

AS FOR A FOURTH AFFIRMATIVE DEFENSE AND SECOND COUNTERCLAIM AGAINST THE PLAINTIFF, THE DEFENDANT ALLEGES AS FOLLOWS:

15. It repeats and realleges each and every allegation contained in paragraphs Nine and Ten of this Amended Answer as if fully set forth herein.

16. That on or about July 24, 1972 the plaintiff issued to defendant a certain policy of insurance bearing No. P & I C-72124, a copy of which is annexed hereto and made a part hereof.

17. That on or about December 17, 1972 the barge Hughes No. 136 capsized, causing damage and loss to the barge and its equipment.

18. As a result of the foregoing incident, the defendant incurred costs or expenses of, or incidental to, the removal of the wreck of the barge and its equipment, which removal was compulsory by law.

19. All conditions precedent have been performed or have occurred.

20. That as a result of the foregoing, the plaintiff is obligated to compensate the defendant for the aforesaid costs or expenses, which are, upon information and belief, estimated to be approximately \$165,831.83.

WHEREFORE, defendant demands judgment declaring that the plaintiff is obligated by the terms of the policy of insurance to compensate defendant for any and all claims arising out of the capsizing of the barge Hughes No. 136 on or about December 17, 1972 and for judgment on the first counterclaim in the amount of \$500,000.00 and on the second counterclaim in the amount of \$165,831.83.

Answer to Amended Counterclaims.

(Document No. 14)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

Plaintiff, by its attorneys, Macklin, Hanan & McKernan, answering the amended counterclaims of the defendant herein, states and alleges upon information and belief as follows:

FIRST: Admits the allegations contained in Paragraph 9 of the counterclaim.

SECOND: Admits the allegations contained in Paragraph 10 of the counterclaim.

THIRD: Admits that the copies of Policy No. HC 01 27 81, attached to the answer, are portions of Policy No. HC 01 27 81 issued by the plaintiff herein, but denies said copies constitute the full and complete policy.

FOURTH: Admits the allegations contained in Paragraph 12 of the counterclaim.

FIFTH: Denies the allegations contained in Paragraph 14 of the counterclaim.

AS A FIRST AFFIRMATIVE DEFENSE TO THE COUNTERCLAIM:

SIXTH: Plaintiff realleges each and every allegation contained in Paragraphs First through Twelfth of the Complaint herein and asserts certain allegations as an affirmative defense to defendant's counterclaim.

Answer to Amended Counterclaims

AS AND FOR A SECOND AFFIRMATIVE DEFENSE TO THE COUNTERCLAIM :

SEVENTH: Plaintiff alleges that the barge Hughes No. 136 at all material times was unseaworthy and unable to withstand the use and ordinary hazards and its alleged loss was caused by said unseaworthy conditions and for which the plaintiff herein is not liable.

AS AND FOR A THIRD AFFIRMATIVE DEFENSE TO THE COUNTERCLAIM :

EIGHTH: Plaintiff alleges that the defendant's loss, if any, resulted solely from defendant's failure to use due diligence as required by the terms and conditions of the policy of insurance pursuant to which defendant herein makes claim upon the plaintiff.

AS AND FOR A FOURTH AFFIRMATIVE DEFENSE TO THE COUNTERCLAIM :

NINTH: Plaintiff alleges that subsequent to the issuance of Policy No. HC 01 27 81, the defendant placed on board the Hughes No. 136 material and equipment, the value of which exceeded the limits set forth in the policy.

TENTH: That upon information and belief all said material and equipment were on board on or about December 17, 1972, and is the material and equipment for which claim is made by defendant in the counterclaim herein.

ELEVENTH: That if this court were to find that plaintiff is obligated to compensate defendant pursuant to the terms and conditions of Policy No. HC 01 27 81 for the loss occurring on or about December 17, 1972, then and in that event defendant is only entitled to damages

Answer to Amended Counterclaims

in a percentage equal to that which the limits of the insurance policy here in question bears to the fair market value of the material and equipment on board the Hughes No. 136 on December 17, 1972.

AS TO THE SECOND COUNTERCLAIM:

TWELFTH: Denies the allegations set forth in Paragraph 15 of the second counterclaim, except as otherwise pleaded herein.

THIRTEENTH: Admits the allegations set forth in paragraph 16 of the second counterclaim, subject to the terms and conditions of the original of the policy of insurance.

FOURTEENTH: Admits the allegations of Paragraph 17 of the second counterclaim.

FIFTEENTH: Denies the allegations in Paragraph 18 of the second counterclaim.

SIXTEENTH: Denies the allegations in Paragraph 19 of the second counterclaim.

SEVENTEENTH: Denies the allegations in Paragraph 20 of the second counterclaim.

AS AND FOR A FIRST AFFIRMATIVE DEFENSE TO THE SECOND COUNTERCLAIM:

EIGHTEENTH: That, but for defendant's breach of the terms, conditions and warranties of plaintiff's Policy No. HC 01 27 81, the loss for which defendant makes claim herein was collectible pursuant to that policy and accordingly is specifically excluded from the coverage of Policy No. P&I C-72124.

Answer to Amended Counterclaims

AS AND FOR A SECOND AFFIRMATIVE DEFENSE TO THE SECOND COUNTERCLAIM:

NINETEENTH: That, assuming liability of the plaintiff herein pursuant to the terms and conditions of this policy, which plaintiff specifically denies, the value of the salvage exceeds the cost of the removal of the wreck and equipment and accordingly, there are no monies due and owing to the defendant by the plaintiff.

AS AND FOR A THIRD AFFIRMATIVE DEFENSE TO THE SECOND COUNTERCLAIM:

TWENTIETH: That pursuant to the terms and conditions of policy of insurance No. P&I C-72124 and its Endorsements, the loss for which defendant makes claim herein is not a loss for which defendant is entitled to be compensated.

WHEREFORE, plaintiff demands judgment dismissing the counterclaims, together with the costs and disbursements and such other relief as is just in the premises.

Pre-Trial Order.

(Document No. 35)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

On October 23, 1975 and on January 21, 1976 the attorneys for the parties in this declaratory judgment action appeared before the Honorable Harold J. Raby, United States Magistrate, for pre-trial conferences pursuant to Rule 16 of the Federal Rules of Civil Procedure; and the following action was taken:

1. The pleadings were agreed to be deemed amended in accordance with the framing of the issues in paragraph "7" of this Pre-Trial Order.

2. The parties agreed that the trial of this action should be based upon this order and upon the pleadings (including any amendments thereto subsequent to entry of this Pre-Trial Order). No issue raised by the pleadings is expressly abandoned.

3(a). The parties stipulated that the following facts are not in dispute in this action (each party reserving the right to object to the materiality of any such stipulated fact and its relevancy to the issues):

(1). Plaintiff, The Continental Insurance Company (hereinafter "Continental"), is a corporation incorporated and existing under the laws of the State of New York. It maintains an office at 80 Maiden Lane, New York, New York, and its principal business is property and casualty insurance.

Pre-Trial Order

(2). The defendant, Hersent Offshore, Inc. (hereinafter "Hersent"), is a corporation incorporated and existing under the laws of the State of New York. It maintains an office at 29 Broadway, New York, New York, and its principal business is marine engineering and marine construction.

(3). On or about July 24, 1972 Continental issued Hull Policy No. HC 01 27 81 to DeLong of New York, Inc. insuring Barge #136, Crawler Crane (Manitowoc Model #4100W), and Miscellaneous Equipment; the total amount insured being \$436,000.00. Endorsement No. 5 thereto effective October 13, 1972 changed the name of the insured from DeLong of New York, Inc. to Hersent Offshore, Inc. (The terms and conditions of the Hull Policy more fully appear in plaintiff's Exhibit No. 1).

(4). On or about July 24, 1972 Continental issued Protection and Indemnity Policy No. P & I C-72124 to DeLong of New York, Inc. insuring against certain risks pertaining to the aforesaid Barge #136. (The terms and conditions of the Protection and Indemnity Policy more fully appear in plaintiff's Exhibit No. 2.)

(5). At some time during December 15-17, 1972 Barge #136 capsized in eastern Long Island Sound while moored a little more than a mile off Jacobs Point, Long Island. The aforesaid Crawler Crane and certain Miscellaneous Equipment were aboard Barge #136 at the time of the capsizing.

(6). On March 19, 1973 Continental commenced this action (as amended) under the Federal Declaratory Judgment Act (28 U. S. Code §2201) seeking a judgment declaring that it is not obligated to defendant under the Hull Policy nor under the Protection and Indemnity Policy in connection with the capsizing of Barge #136. Hersent, on the other hand, has claimed for recovery (by way of counterclaims) under each of the above policies.

Pre-Trial Order

3(b). The plaintiff's contentions as to liability are as follows:

(1). On or about June 29, 1972 Hersent (then named De-Long of New York Inc.) represented that there would be a watchman hired by it at the tanker berth construction site, equipped with a radio-telephone and a small outboard motor boat, during off hours and that weather reports would be monitored via the radio-telephone. There was no compliance with this representation and such misrepresentation defeats recovery herein by Hersent.

(2). Hersent breached the express warranties contained in the Hull Policy's "Storm and Heavy Weather Plan," which came into play when a northeast storm threatened, as follows:

- (a) The Crawler Crane's boom, when lowered, and cradled, was not secured in place.
- (b) Mooring lines were not rigged so as to allow Barge #136 to swing with its end into the seas and swells (so as to avoid the threat of more nearly beam seas and swells).
- (c) No alert was given for Tug Paumanok and Crew Boat Tracey Miller to "stand-by" in case conditions became unduly severe and such that assistance was required.
- (d) Tug Paumanok and Crew Boat Tracey Miller were not utilized to bring Barge #136 to the safety of Mattituck Inlet and were not kept available as weather conditions worsened.

(3). The capsizing of Barge #136 was not a fortuitous event occurring through extraordinary action of the elements.

Pre-Trial Order

(4). Barge #136 was 135 feet in length, had a 50 foot beam, and was flat-bottomed. Its capsizing in Long Island Sound waters raises a presumption that it was unseaworthy in one or more particulars.

(5). The implied warranty of seaworthiness was breached. Hersent knowingly permitted Barge #136 to be moored in an exposed position in Long Island Sound while in an unseaworthy condition.

(6). Hersent did not exercise due diligence towards maintaining Barge #136 in a seaworthy condition.

(7). The unseaworthiness of Barge #136 and breach of the aforesaid warranties were proximate causes of the capsizing.

(8). Hersent's claim under the Protection and Indemnity Policy does not state one upon which relief can be granted. Removal of the "wreck" was not compulsory by law. (The property insured had not been abandoned by Hersent nor was there a Government order for its removal from navigable waters.)

3(c). The defendant's contentions as to liability are as follows:

(1). The capsizing of the Barge #136 was caused by one or more risks insured against under the Hull Policy.

(2). Expenses and costs incurred by Hersent in connection with the raising and removal of the Barge #136, the Crane and Miscellaneous Equipment, are reimbursable under the provisions of the Protection & Indemnity Policy.

(3). Hersent did not act or fail to act in any way so as to prevent it from recovering from Continental on either policy for any of the reasons alleged in paragraph 3(b) above.

Pre-Trial Order

(4). By participating in the salvage and/or the removal of the Barge #136, the Crane and Miscellaneous Equipment, Continental has waived (or is estopped from denying) any defense it may otherwise have had to liability under either policy.

(5). The issue posed by plaintiff's contention in paragraph "3(b)(1)" above is not embraced in the pleadings not referred to in answers to discovery and the raising of it at this stage of the litigation is untimely. In any event, defendant contends that any such defense would not defeat recovery by it.

4(a). The exhibits which each party now expects to offer at the trial are as follows:

Plaintiff's Exhibits

- (1). Continental Hull Policy No. HC 01 27 81.
- (2). Continental Protection and Indemnity Policy No. P & I C-72124.
- (3). Hull and Cargo Surveyors, Inc. reports:
 - (a) June 29, 1972—No. MC72005
 - (b) July 11, 1972—No. H 72405
 - (c) August 21, 1972—No. H 72449
 - (d) January 8, 1973—No. HL 73002
 - (e) January 4, 1973—(Preliminary Report—12/26/72)
 - (f) January 3, 1973—(Preliminary Report—1/3/73)
 - (g) January 9, 1973—No. HL 73002
 - (h) January 18, 1973—No. HL 73002
 - (i) February 6, 1973—No. HL 73002
 - (j) April 3, 1973—No. HL 73002

Pre-Trial Order

- (k) July 3, 1973—No. HL 73002
- (4). Log of Tug Paumanok.
- (5). Day Book of Crew Boat Tracey Miller.
- (6). Log of Utility Boat Wayzoff.
- (7). Memo Pad Log maintained by John Mayer.
- (8). Dock Log of Northville Industries Corp.
- (9). National Oceanic and Atmospheric Administration Chart No. 12358 (Shelter Island Sound and Peconic Bays) (formerly C & GS 363).
- (10). Hersent Offshore, Inc. time cards for carpenters (Foreman's Daily Reports).
- (11). Hersent Offshore, Inc. payroll receipts for operating engineers.
- (12). Northville Industries Corp. tabulation of its Marine Department's services rendered to Hersent Offshore, Inc.
- (13). Equipment Lease Agreement dated July 5, 1972, between Peter Kiewit Sons' Co. and DeLong of New York, Inc. covering Steel Deck Barge #136.
- (14). Rental Agreement dated July 17, 1972 between Gerosa Crane Services Co., Inc. and DeLong of New York, Inc. covering Crawler Crane (Manitowoc Model No. 4100W).
- (15). Charter Agreement between Marine Pollution Control, Inc. and DeLong of New York, Inc. covering Crew Boat Tracey Miller.
- (16). Rental Agreement dated July 17, 1972 between Koch Crane & Derrick Co., Inc. and DeLong of New York, Inc. covering Crawler Crane (Manitowac Model No. 4100W).

Pre-Trial Order

(17). Charter Agreement(s) between Gates Construction Corp. and DeLong of New York, Inc./Hersent Offshore, Inc.

(18). National Oceanic and Atmospheric Administration (National Weather Service) Marine Weather Services Charts:

(a) Eastport, Me. to Montauk Point, N. Y.

(b) Montauk Point, N. Y. to Manasquan, N. J.

(19) National Weather Service Forecasts (December 12-17, 1972) for Long Island Sound to Montauk Point and Block Island.

(20) North Atlantic Marine Advisories (December 14-16, 1972).

(21) Marine Coastal Weather Log—Falkner Island (December 10-18, 1972).

(22) Auxiliary Coastal Weather Observations—Falkner Island (December 10-20, 1972).

(23) Marine Coastal Weather Log—Little Gull Island (December 1972).

(24) Surface Weather Observations—Trumbull Airport, Groton, Connecticut (December 12-17, 1972).

(25) Surface Weather Observations—New Haven, Connecticut (December 12-17, 1972).

(26) Surface Weather Observations—Calverton, New York (December 11-18, 1972).

(27) Record of Climatological Observations—Cutchogue, New York (December 1972).

(28) Record of Climatological Observations—Riverhead Resesarch, New York (December 1972).

Pre-Trial Order

(29) Marine Coastal Weather Log—Eatons Neck, New York (December 13-17, 1972).

(30) North American Surface Charts (December 15-17, 1972, at three-hourly intervals).

(31) Lambert Conformal Conic Projection (United States and Southern Canada).

(32) Photographs.

4(a)

Defendant's Exhibits (in addition to any or all documents designated above as plaintiff's exhibits):

(1). Daily statement sheets of International Underwater Contractors, December 21, 1972 through May 7, 1973.

(2). Marine Coastal Weather log, surface weather observation and records of climatological observations, Faulkner Island, Little Gull Island, Calverton, Westhampton Beach, Fishers Island, Montauk, Riverhead, Islip, and East Moriches, New York, and Bridgeport, Connecticut, National Oceanic and Atmospheric Administration ("NOAA"), December 12-18, 1972.

(3). Marine Forecasts, Long Island Sound to Montauk Point and Block Island, Block Island to Manasquan, and New York Harbor, NOAA, December 12-18, 1972.

(4). North American Surface Charts, NOAA, December 12-18, 1972.

(5). Wind charts, storm data, Unusual Weather Phenomena, and Weekly Weather and Crop Bulletin, NOAA, December 12-18, 1972.

(6). NOAA Chart No. 12354 (Long Island-Eastern Part) (formerly C&GS 1212).

Pre-Trial Order

- (7). Tide reports for Long Island Sound and vicinity, NOAA, December 12-18, 1972.
- (8). Drawings of plan, elevation and site location of Barge #136.
- (9). Drawings and memorandum by Captain Lewis C. McKay from which defendant's exhibit 8 above, were made.
- (10). Statement of R. M. Salvage, dated December 17, 1972.
- (11). Table of weights and locations of equipment on Barge #136, by Hersent Offshore, Inc.
- (12). Manitowoc crane Model 4100W service manual (machine no. 41073).
- (13). Manitowoc crane Model 4100W parts manual (machine no. 41073).
- (14). Karl Koch Erectors, Inc. list of parts for repair of Manitowoc crane after capsize.
- (15). Quotation of Manitowoc-Forsyth Corporation for repair of crane after capsize, dated February 13, 1973.
- (16). Photographs of Barge #136, moorings, and salvage operations by John Mayer.
- (17). Photographs of Barge #136 and salvage operations by Robert Miller.
- (18). Miscellaneous photographs of Barge #136.
- (19). Log sheets of Century, January 10-14, 1973.
- (20). Hull and Cargo Surveyors, Inc. inspection report dated August 22, 1972, No. H-72510.
- (21). Gaugers' log, Northville Industries Corp.

Pre-Trial Order

(22). Marine Services Department log, Northville Industries Corp.

(23). Letter from Armitage & Co., Inc. to D. P. Romando, dated December 21, 1972.

(24). Lease Agreement No. 11445, dated July 15, 1972, for lease of Gardner-Denver compressor S/N 553953, and 3 air hoses.

(25). Lease Agreement No. 11446, dated July 27, 1972, between DeLong of New York and Peter Kiewit Sons' Co., for lease of a Peerless jet pump with Cummins engine, S/N 324107.

(26). Lease Agreement No. 11443, dated June 24, 1972, between DeLong of New York and Peter Kiewit Sons' Co., for lease of Conmaco 300 pile hammer with driving head and offshore leads, S/N FG5285.

(27). Lease Agreement No. 11444, dated July 15, 1972, between DeLong of New York and Peter Kiewit Sons' Co. for rental of two Lincoln 400 amp. welding machines and six Lincoln 300 amp. welding machines.

(28). Rental Agreement No. 424, between Hersent Offshore, Inc. and Foster, for rental of one Kobe KB-60 diesel hammer, with 1-KIB insert.

(29). Agreement between DeLong of New York and Arthur Industries, Incorporated, for rental of one Model A-36 Trailer.

(30). Handwritten statement of Robert Green.

(31). Contract dated May 23, 1972, and addendum thereto, between DeLong of New York and Northville Industries Corp.

(32). Copies of pages, bills, drafts and checks for payments made or demanded in connection with the capsizing and salvage operations.

Pre-Trial Order

(33). Time records for Hersent employees during latter part of 1972.

4(b). Should either party hereafter decide to offer additional exhibits, prompt notice of such decision shall be given to the other party in writing. The additional exhibits shall be identified by number/letter and description; and the reason why the exhibits had not been theretofore identified shall be set forth. No exhibit may be offered at trial unless identified as above stated.

4(c). Of the documents listed in paragraph "4(a)" hereof, those marked with an asterisk are conceded to be genuine (but without conceding admissibility). All others are deemed marked for identification only.

5(a). The parties agree that the witnesses whom each party now intends to call (along with the specialty of experts to be called) are those listed below:

Plaintiff's Witnesses:

William B. Bolton
Vice President (Hull Underwriting)
Marine Office—Appleton & Cox Corporation

Thomas S. Deering
Manager, Marine Claims Department
Marine Office—Appleton & Cox Corporation

Joseph M. McLaughlin
Surveyor
Hull and Cargo Surveyors, Inc.

Capt. Robert H. Smith
Surveyor
Hull and Cargo Surveyors, Inc.

Andrew A. Voltmann
91 Barbara Drive
East Meadow, New York

Pre-Trial Order

W. F. Warm
Surveyor
Hull and Cargo Surveyors, Inc.

Capt. Arnold Wildner
349 52nd Street
Brooklyn, New York

John J. Mayer
85 Joline Road
Port Jefferson, New York

Frank W. Carr
4949 Pequash Avenue
Cutchoque, New York

Robert J. Green
15 Paula Drive
Farmingdale, New York

Capt. L. C. McKay
Vice President
Northville Industries Corp.

Harold E. Brush
Surveyor
Hull and Cargo Surveyors, Inc.

Henry Janes
Professional Engineer
148 Wagstaff Lane
West Islip, New York

Conrad B. Gosset
Meteorologist
The County Trust Building
Pleantville, New York

()
(Expert on Hydrography)
()
(Expert on Seamanship)

Pre-Trial Order

Defendant's Witnesses (in addition to any or all persons named as plaintiff's witnesses):

Hans Wendel
Northville Industries, Inc.
Riverhead, New York

Red Stevens
Peter Kiewit Sons' Co.
120 Old Country Road
Tenafly, New Jersey

Emil Dantes
c/o Western Foundation
249 East 48 Street
New York, New York

Joseph Chickvary
International Underwater Contractors, Inc.
264 Fordham Place
City Island, Bronx, New York

Helmut Schaeffer
Manitowoc-Forsyth Corporation
37-11 Vernon Blvd.
Long Island City, New York

Joseph Miller
Hersent Offshore, Inc.
29 Broadway
New York, New York

James C. Armitage
c/o Armitage & Co.
60 East 42 Street
New York, New York

Everett DeFriest
261 Madeira Avenue East
Maderia Beach, Florida 33703

Pre-Trial Order

Robert Miller
P. O. Box 48
Aguebogne, L. I., New York

Tony Frandina
Karl Koch Erectors, Inc.
Roosevelt Avenue
Carteret, New Jersey

Ed Ganly
Naval Architect and Marine Engineer
Ganly-Briggs, Inc.
275 Hillside Avenue
Williston Park, New York

Arthur Pedersen
3252 Windmill Village
Punta Gorda, Florida 33950

George Dyott
3669 Naomi Street
Seaford, New York

A. A. Freelund
Naval Architech, Marine Engineer, Navigator
C. R. Cushing & Co., Inc.
One World Trade Center
New York, New York

Walter F. Zeltmann
Meterologist
International Weather Corp.
P. O. Box 176
Bay Ridge Station
Brooklyn, New York 11220

(Hersent reserves the right to call experts on hydrography and seamanship.)

Pre-Trial Order

5(b). Should either party hereafter decide to call any additional witnesses, prompt notice of such decision shall be given to the other party in writing. The additional witnesses shall be identified by name and address (and specialty if an expert witness); and the reason why the witnesses had not been theretofore identified shall be set forth. No witness may be called at trial unless identified as above stated.

6. Pursuant to Rule 42(b) of the Federal Rules of Civil Procedure, the parties have agreed, subject to the Court's approval, that the liability issues be tried first and separately from the damages issues. Plaintiff at this time expects to require four trial days; defendant at this time expects to require four trial days.

7. The issues to be tried are formulated by the Court (with the consent and agreement of the parties) as follows:

(1). Is defendant, Hersent Offshore, Inc. entitled to any recovery under the Continental Hull Policy No. HC 01 27 81? Subsidiary issues include the following:

- (a) Did Hersent breach express warranties? If so, is recovery by Hersent defeated?
- (b) Was the capsizing of Barge #136 caused by peril(s) of the sea or other risks insured against under the policy?
- (c) Was an implied warranty of seaworthiness, if any, breached? If so, is recovery by Hersent defeated?
- (d) Did Hersent exercise due diligence towards maintaining Barge #136 in a seaworthy condition? If not, is recovery by Hersent defeated under this policy?

Pre-Trial Order

(e) Has Continental waived (or is it estopped from asserting) one or more of its defenses?

(2). Is defendant, Hersent Offshore, Inc. entitled to any recovery under the Continental Protection and Indemnity Policy No. P & I C-72124? Subsidiary issues include the following:

(a) Had the property insured been abandoned by Hersent?

(b) Did the Government issue an order for removal of the "wreck" from navigable waters?

(c) Has Continental waived (or is it estopped from asserting) its contention that Hersent's claim does not state one upon which relief can be granted?

* (3). Continental has posed the following additional issue:

"Did Hersent make the representations described in paragraph 3(b)(1) hereof; and was there non-compliance therewith?"

Hersent does not consent that such is an issue, claiming, among other things, that raising it at this stage of the

* Amended May 27-28, 1976 as follows:

"Did Hersent make the representations described in paragraph 3(b)(1) hereof; if made, were they promissory representations of material facts; and, if made was there a substantial compliance therewith?" (Barred by "Parole Evidence Rule"?)

29a

Pre-Trial Order

Litigation is untimely and that any such defense would not defeat recovery by Hersent.

Dated: New York, New York
January 21, 1976

So Ordered:

s/ CHARLES H. TENNEY
U. S. D. J.

Consented to:

s/ Macklin, Hanan & McKernan
(Attorneys for Plaintiff)
61 Broadway
New York, New York 10006
(212) 943-7789

Warner and Gillers, P.C.
(Attorneys for Defendant)
By s/ Stephen Gillers
500 Fifth Avenue
New York, New York 10036
(212) 354-5454

Excerpts From Transcript.

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

CONTINENTAL INSURANCE Co.,

Plaintiff,

vs.

HERSENT OFFSHORE Inc.,

Defendant.

73 Civ. 1158

October 12, 1976—10:40 A.M.
Room 518

Before:

Honorable Gerard L. Goettel, District Judge.

Appearances:

Macklin, Hanan & McKernan, Esqs., Attorneys for plaintiff; By: W. Shelby Coates, Jr., Esq., Timothy Hanan, Esq., of Counsel.

Warner & Gillers, P.C., Attorneys for defendant; By: Kenneth Warner, Esq., Stephen Gillers, Esq., of Counsel.

Joseph Miller, for Defendant, Direct

(17) JOSEPH MILLER, called as a witness by the defense, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Warner:

Q. Mr. Miller, what is your present employment? A. I am the project coordinator and assistant controller of Hersent Offshore.

Q. The defendant in this case? A. Yes.

Q. Mr. Miller, for how long a period of time have you been employed by the defendant company? A. Approximately nine years.

Q. When I refer to the defendant company, I will call it Hersent, but is it correct that previously it had another name? A. Yes.

Q. What was that name? A. DeLong of New York.

Q. When did that change? A. The latter part of 1972. I would say roughly around October or November.

Q. Mr. Miller, I direct your attention to the period during the second half of 1972, that is, more or less (18) from about June up through December. What was your employment position with Hersent, and again if it was called DeLong, I will call it Hersent, at that time? A. I was the site manager out at Northville Industries.

Q. Was there a project during that period that was under way at Northville? A. Yes, there was.

Q. Would you tell the Court what that project was? A. This was erecting an offshore oil platform for the purpose of tankers delivering oil to Northville Industries, and being piped into their tanks onshore from this platform.

Q. During the period that this project was under way, did you have occasion to visit the site? A. Yes.

Q. Where was the site? A. Approximately about a mile and a half offshore from Northville Industries—Riverhead, I would guess you would call it.

Q. Is that in the Long Island Sound area? A. Yes.

Joseph Miller, for Defendant, Direct

Q. Mr. Miller, did this project utilize a barge on behalf of Hersent? (19) A. Yes, it did.

Q. What was the name of that barge? A. It was called the PK 136.

Q. Was it also called the Hughes 136, too? A. Yes.

Q. In addition, was there equipment that was used on this barge? A. Yes, there were.

Q. Did that include a crane called the Manitowoc Crane, among other names? A. That is correct.

Q. Did there come a time, Mr. Miller, that Hersent, then called DeLong, took out insurance coverage in regard to the activities and the equipment and other things on this project? A. Yes, there were.

* * *

(24) By Mr. Warner:

Q. Mr. Miller, you said that you had an opportunity during the period that the project was under way to go out to the barge. A. Yes, I did.

Q. Approximately when did the barge go to its site? When I say "site" I mean the point out at sea where the platform and dock was being built. A. I would say somewhere around the end of August, beginning of September.

(25) Q. From that period up to approximately the middle of December, December 15, 16, 17, 18, that general time frame, on approximately how many occasions did you go and visit the barge? A. I was usually out to the barge at least two to three times a day.

Q. Throughout that period? A. Yes.

Q. Now, did you have occasion to go out to the barge subsequent to the morning of December 17, 1972? A. Yes, I did.

Q. When did you go out there for the first time after that morning? A. I believe it was Tuesday morning, which would be the 19th.

Q. Did you see the condition of the barge at that time? A. Yes, I did.

Joseph Miller, for Defendant, Cross

Q. What was its condition? A. She was capsized in the water.

Q. Prior to that morning, on any of the other occasions that you had been out to the site, had you ever seen the barge in that condition? A. No, I didn't.

* * *

(29) By Mr. Warner:

Q. Mr. Miller, are you familiar with a gentleman named Robert Green? A. Yes, I am.

Q. During the period of this project, and in particular from the time that the barge went out to the site up through December, up to the capsize, was Mr. Green employed by Hersent? A. Yes, he was.

Q. And what was his position in regard to the project, if any? A. He was the project manager of the Northville job.

(30) Q. And as part of Mr. Green's duties, was his presence required on the barge on a daily basis? A. Yes, it was.

Q. And when Mr. Green was on the barge, who was in charge of the barge and of all decisions to be made in regard to the barge, including, but not limited to, seamanship and everything else? A. Mr. Green had the ultimate say in it.

* * *

(31) *Cross Examination by Mr. Coates:*

Q. Mr. Miller, did you say that you went out to the barge during the period in question about three times a week?

The Court: Two to three times daily, he said.
Am I correct?

The Witness: Yes, your Honor.

Q. You said it had been moored out there with equipment on it for quite some time.

Joseph Miller, for Defendant, Cross

Could you tell us when it was last back in Mattituck Harbor before it was put on the construction site? A. I am afraid I can't. My memory isn't that sharp right now.

Q. You said that originally it came on station either in late August or early September, is that correct? A. Yes.

Q. 1972. Were there any times when it had been brought into Mattituck Harbor between the late August—early September period and middle December, when the occurrence took place? A. Yes, from time to time, for supplies, additional (32) equipment being put on board, and so forth.

Q. About how many times had it been brought back in? A. I would say maybe about a half dozen times.

Q. How was it brought back in? A. By tug—by being towed by tugboat.

Q. The barge had no power of its own, is that correct? A. No.

Q. What tug was utilized to bring it back into Mattituck Harbor? A. The tug Paumanok.

Q. Was that tug owned by Hersent? A. No, it was chartered.

Q. Was it crewed by Hersent personnel? A. Yes, we supplied the crew for the boat.

Q. And Hersent paid the crew members, is that correct? A. Yes.

Q. Was there a crew boat named Tracy Miller that was also leased by Hersent? A. That is correct.

Q. Was that crewed by Hersent-employed personnel? A. Yes, it was.

(33) Q. Was that ever utilized along with the tug in bringing the barge back into Mattituck Inlet? A. No.

Q. Mr. Miller, I show you the photograph marked D, and ask you at what location was the barge and crane moored, if you know, at the time that photograph was taken? A. Well, it wasn't out in Long Island. I believe it could have been over in New Jersey at the time.

Q. Well then, this was before it even came to Eastern Long Island Sound, is that correct? A. That is correct.

Joseph Miller, for Defendant, Cross

Q. How can you tell that? A. By seeing the boundary of it.

Q. And you are very familiar with the Mattituck Inlet? A. And the dockside itself.

Q. Did you have an office at the Northville Industries facility? A. Yes, I did.

Q. Where is that located with respect to Mattituck Inlet? A. That was about four miles away, four, five miles away from Mattituck.

Q. Did Mr. Green also have an office at the Northville (34) Industries facility? A. We used the same office.

Q. Did you each have two desks in one room or— A. No, there was only one desk.

Q. Whose desk was it, principally? A. Mine.

Q. Was there a radio in that office space? A. Not in the office itself. In Northville, about two rooms away, there was a radio.

Q. This is as of middle of December 1972? A. Yes.

Q. What kind of radio was that? A. It was a ship-to-shore radio.

* * *

(39) By Mr. Coates:

Q. Mr. Miller, did you have a secretary in your office? A. No, I didn't.

Q. Did you use someone else's secretarial services? A. The majority of the time I did the work myself.

Q. When Mr. Green had something that he wished to be typed up, who did he use? A. He very rarely had anything to type up.

Q. Could you describe his duties and your duties, making a segregation between them? A. I took care of the administrative work and Mr. Green was strictly concerned with the building of the platform.

Q. You worked under him, is that correct? A. That is correct.

Joseph Miller, for Defendant, Cross

Q. So you would say that he also supervised the shore side work of the project? A. Yes.

* * *

(44) Q. Mr. Miller, where were you on Thursday, December 14, 1972? A. I was out at the site.

Q. How did you get out there? A. By car. You mean the construction site?

Q. Yes. A. Well, I was in my office at Northville and also I probably had gone out to the platform.

Q. Do you recall going out on Thursday, December 14, 1972? A. I would say yes.

Q. By what means did you go out there? A. The Tracy Miller.

Q. Did the Tracy Miller pick up a crew that morning to go out there to conduct work at the site? A. I believe so.

Q. Were there dock builders among the crew? A. Yes, there were.

(45) Q. Were there engineers among the crew? A. Yes.

Q. What was the function of the dock builders? A. The dock builders were doing the rigging and the welding work.

Q. Who was their foreman? A. A man by the name of Emile Dantes.

Q. Who was their foreman in December of 1972? A. A man by the name of Frank Carr, I believe.

Q. What was the function of the engineers? A. The engineers ran the equipment on board.

Q. Such as the crane? A. Yes.

Q. Pile driver? A. Yes.

Q. Can you name some of the principal pieces of equipment? A. Welding machine, compressors, generator.

Q. Could you say how the barge was moored when you went out there on Thursday, December 14, 1972. A. I am afraid not. I don't recall.

Joseph Miller, for Defendant, Cross

The Court: Where did the crew boat leave from, Mattituck Inlet or Jacobs Point?

The Witness: It left from Mattituck.

• • •

(52) By Mr. Coates:

Q. Mr. Miller, using this Exhibit No. 1 to refresh your recollection as necessary, what was the purpose of Mr.—Robert Miller, I believe his name was, the purpose of his dive? A. Well, it was to determine the cause or the possible reason for the barge to have overturned.

Q. Did he report the cause to you? A. Not to me, no.

Q. Did he report it to Mr. Robert Green? A. I believe so.

Q. Did he report it in writing to Mr. Robert Green? A. That I don't know.

Q. Is Mr. Robert Green in the courtroom today? A. No, he is not.

Q. Do you know where he is? A. Possibly at his home or at his place of business in Pittsburgh.

Q. For whom does he work in Pittsburgh now? A. I believe it is Dravo Corporation.

Q. When was the last time you saw Robert Green? (53) A. About four months ago.

Q. Mr. Miller, you oversaw the payment of the various employees, and this would include the tug Paumanok, is that correct? A. That's correct.

Joseph Miller, for Defendant, Cross

Q. Did the crew of the Paumanok work on Friday, December 15, 1972? A. Yes, they did.

Q. Did the tug Paumanok put out into Long Island Sound from the Mattituck Inlet at all on December 15th, that is Friday, 1972? A. That I don't know.

Q. Did the crew of the tug Paumanok work on Saturday, December 16, 1972? A. Yes, they did.

Q. Do you know what they did on that day? A. As far as I know, they were on standby.

Q. Were you present at the shore side site on Saturday, December 16, 1972? A. No, I was not.

Q. You didn't go to your office that day? A. No.

Q. So you don't know what the tug crew actually did, from your own knowledge, is that correct? (54) A. Right.

Q. What about the following day, Sunday, December 17, 1972, was the tug crew aboard the tug Paumanok and being paid for that? A. No, they weren't.

Q. They weren't? A. No.

• • •

By Mr. Coates:

Q. There came a time during the Fall of 1972 when (55) the boom of the Manotowoc was lengthened, is that correct? A. That's correct.

Q. Did Hersent pay for whatever was required in lengthening the boom of the crane? A. Yes, they did.

Q. Should your records show when that boom was lengthened, how much it was lengthened, how much was

Joseph Miller, for Defendant, Cross

paid for the job, and who performed it; where the job was performed? A. Yes. It would, yes.

Mr. Coates: I would like those records produced, also. Not immediately, but I think—

Mr. Warner: Your Honor, that record we don't have. We have looked for it. We have been looking for it for quite awhile but we haven't been able to find it.

By Mr. Coates:

Q. Do you know who performed the boom lengthening job, what company? A. Our own crew did the work. We did the work of lengthening the boom.

Q. Where was the extra segment of the boom obtained? A. I believe from Koch Erecting Company.

* * *

(57) Q. Was the crane brought into Mattitick Inlet for the purpose of lengthening the boom? A. Yes, it was.

Q. And then it was sent back out into Long Island Sound with the boom lengthened (58) A. Yes.

Q. Concerning who was present at the offshore construction site during Friday, Saturday and Sunday what you say the tug crew was doing, what about any other workers in Hersent's employ, were they out there on Friday, December 15, 1972 for all or part of the day, working day? A. I can't give you a direct answer. I'd have to consult the payroll records to actually say yes or no.

Joseph Miller, for Defendant, Cross

Q. What about Saturday, the 16th, do you know whether they were out there then? A. I don't believe so, because the weather was bad and we—Mr. Green said there would be no work over the weekend.

Q. This would be true of Sunday, also, is that right? A. Yes.

Q. The barge and the crane had been surveyed by Hull and Cargo Surveyors as part of the—well, prior to being delivered out to Jacobs Point it had been surveyed by Hull and Cargo Surveyors, is that correct, one of their representatives? A. Yes.

Q. One of their representatives was present when (59) the crane was loaded aboard the barge at some location in New Jersey, is that correct? A. That's correct.

Q. When the boom was lengthened, was one of their employees in attendance, or was he consulted with respect to the lengthening of the boom, if you know? A. I don't know, no.

Q. Was a notice given to the insurance underwriters that the boom was going to be lengthened and that it had been lengthened? A. That I don't know again.

Mr. Coates: No further questions, your Honor.

The Court: Any re-direct?

Mr. Warner: Yes, briefly, your Honor.

Kenneth DeFriest, for Defendant, Direct

Re-direct Examination by Mr. Warner:

Q. Mr. Miller, you said you didn't know the exact date on which the boom was lengthened, is that correct? A. That is correct.

Q. Making your best estimate, if you can, would you say it was lengthened, though, prior to December of 1972? A. Yes.

Q. Again, using your—making your best estimate, (60) would you say that it was lengthened prior to November of 1972? A. Possibly.

Q. So that your best—please don't let me put words in your mouth, am I correct in saying that your best estimate is approximately around the period of November, 1972, or possibly before that? A. I would say, yes.

• • •

(69) KENNETH DEFRIEST, a witness called on behalf of the defendant, being first duly sworn by the Clerk, was examined and testified as follows:

Mr. Warner: I would ask, your Honor, that the book that I am holding in my hand be marked, pursuant to agreement between myself and Mr. Coates, Defendant's Exhibit I.

(Defendant's Exhibit I is marked for identification.)

Direct Examination by Mr. Warner:

Q. Mr. DeFriest, are you employed at the present time? A. Yes.

Q. Where and in what capacity? A. Northville Industries, gauger.

Q. How do you spell that word gauger? A. G-a-u-g-e-r.

Kenneth DeFriest, for Defendant, Direct

Q. Where is Northville Industries? A. Riverhead, Long Island.

Q. Are you familiar with the company called Hersent Offshore? A. Yes, sir.

(70) Q. It is for the Northville Industries that you work for that Hersent was doing a project back in 1972, is that right? A. That's correct.

Q. Now, when were you first employed by Northville Industries in your present capacity as a gauger? A. I believe it was June of '72.

Q. Had you worked for Northville Industries as a gauger prior to that, although not on the full time basis? A. No, not as a gauger.

Q. But you had worked for them, is that right? A. That is correct.

Q. And have you been working for Northville Industries as a gauger continuously since June of 1972? A. Yes.

• • •

(74) By Mr. Warner:

Q. Now I direct your attention, Mr. DeFriest, to the period after the barge 136 was located at the site building the platform, or project. After the barge was located there, did your duties change? A. Yes.

Q. In what way did they change? A. We would have to keep an eye out on the barge.

Q. To see what about it, how it was— A. Well, just—we couldn't get out there, I mean, being a gauger, but I could look out there, and see if everything—I could tell if everything looked pretty well in place.

Q. What was the location in the course of your rounds from which you could—you would look out to see the barge? A. I could see it from either the beach or above by the tanks.

(75) Q. Could you point out to his Honor on the maps that are on the Court's table where these locations were that you could see it? I have a pen of blue, a blue pen, if you could make a mark there for the Judge.

Kenneth DeFriest, for Defendant, Direct

The Court: Don't use X. We have used X already.

The Witness: Put an X here?

The Court: Not an X.

Mr. Warner: Put an A.

The Witness: Anywhere down on the beach here.

Mr. Warner: Put a large A then.

The Court: You could see even better, I would assume, from up above on the cliff?

The Witness: Yes. Both places. (Witness marking diagram.)

* * *

(76) By Mr. Warner:

Q. Mr. DeFriest, you mentioned before the term "we". You said "we" in reference to your duties. Were you referring there to the other gaugers as well? A. That's correct.

Q. How many gaugers are there? A. There are four of us.

Q. How many shifts are there? A. Three.

Q. So does one gauger have off then while the other three are working on the shifts? A. We have somebody there 24 hours a day, seven days a week.

Q. During the period from June of 1972 up through December of 1972, did you occupy various shifts or did you have only one shift? A. That's correct, various. All three shifts.

Q. At varying times throughout that period, did you work on each of the shifts so that through that period you had at least once all three shifts? A. That's right.

(77) Q. During the course of the duties of the gaugers, is it required to keep any record? A. Yes, we keep the gauger's log.

* * *

Kenneth DeFriest, for Defendant, Direct

(79) By Mr. Warner:

Q. Mr. DeFriest, the duties that you were describing both before the barge was at the work site where the platform was being built and after the barge (80) was at the work site, are those the duties of all of the gaugers on each of their shifts? A. That's correct.

Q. Mr. DeFriest, the area where the construction was taking place utilizing the barge, did that have a general name? A. The mooring area.

Q. Why is it called the mooring area? A. Well, our submarine lines run out there and before the platform ships used to tie up to buoys and it's where they had to be moored because the pipeline ended there.

Q. And after the platform was built would they still come there? A. Yes, they come to the platform, tie right up to it.

Q. What kind of ships were they that tied up there? A. Tankers, ocean going.

Q. During the time that you have been on the job have you seen tankers come and go there? A. Yes.

Q. Does that happen on a year round basis? A. Year round, right.

(81) Q. Mr. DeFriest, what shift were you on on Friday the 15th of December 1972? A. I believe it was midnight to eight.

Q. So that you could come on midnight Friday and finish 8 a.m. Saturday? A. That's correct.

Q. Were you also on duty the next Sunday? A. That's correct.

Q. What was your shift then? A. Midnight to 8.

Q. When you finished your shift on Sunday at approximately 8 a.m., before leaving work did you have an opportunity to look out to the area where the barge was located? A. I did.

Q. And did you see that area? A. Yes, I did.

Q. And what did you see? A. I saw the barge—I couldn't tell if it was sunk. I just didn't see the crane.

Kenneth DeFriest, for Defendant, Cross

Q. So you couldn't see it on the horizon, so to speak?
A. Right, I couldn't make out any crane out there.

(82) Q. Did you ultimately learn that in fact it was capsized? A. Right.

Q. The previous day when you finished work at approximately 8 o'clock in the morning did you have occasion to look out and see the barge area? A. Yes, I did.

Q. And what did you see then? A. I could see—make the crane out.

Q. Could you see the crane and the barge in an upright position? A. Oh, yes.

Q. On the water, floating? A. Right.

(84) *Cross Examination by Mr. Coates:*

* * *

(91) Q. You testified that one of the duties that you have been charged with was to "keep an eye on the barge." How often, and from what vantage point would you do that? A. Well, if I was on the day shift, the daylight hours, I would, you know, at least every hour and a half, two hours, I would just visually look out there, and you know, if it looked all right, it was all right.

The Court: You say on the day shift. Didn't the barge have lights on it?

The Witness: It had one light on it.

The Court: Couldn't you see the light at night?

The Witness: Yes, you could, if it was on.

The Court: The night of the 16th and 17th, which is to say, Sunday morning—make that the 17th and the 18th rather than the 16th and 17th, Sunday morning after midnight, you went on duty, right?

The Witness: That's right.

The Court: But it wasn't until 8 a.m. that you noticed that the barge—rather, the crane was missing?

(92) The Witness: That's right.

Kenneth DeFriest, for Defendant, Cross

The Court: At any time between midnight and 8 a.m. did you ever see the light on the barge?

The Witness: No, I did not.

The Court: Did you look for it?

The Witness: Yes.

The Court: Was it missing?

The Witness: That's right.

The Court: So that when you first came on duty at midnight, how soon thereafter did you look for it?

The Witness: 1:30.

The Court: At 1:30 a.m. on the morning of December 18th you did not see the light on the barge.

The Witness: You mean the 17th, am I right?

The Court: Well, perhaps. Yes.

Let's hold on a moment. You have given me extracts covering the 18th. I don't know for what purpose, except perhaps to confuse me.

All right. The 17th is Sunday. You came on duty midnight Saturday night, stayed on until 8 a.m. Sunday morning, which was the 17th.

The Witness: That's correct.

The Court: Around 1:30 a.m. on the morning of the 17th you looked for the light on the barge and didn't see (93) it?

The Witness: That's correct.

The Court: Do you know if the person who preceded you had looked for the light on the barge?

The Witness: Yes.

The Court: What did he tell you?

The Witness: It wasn't on.

The Court: He didn't see it either?

The Witness: No, he didn't.

The Court: For whatever significance it had then, even before the 17th, the light on the barge was not visible.

The Witness: That's correct.

The Court: Proceed.

Kenneth DeFriest, for Defendant, Cross

By Mr. Coates:

Q. Did the barge have one light or two lights? A. One.

Q. There was a gas buoy with a light, too, is that right?

A. That's correct.

Q. Who checked the weather reading instruments periodically for accuracy, if anyone? A. I don't know.

Q. Looking at your gauger's log, can you find an (94) entry in it indicating the last time when the light on the barge was noted as having been lit? In other words, we have an entry on your watch, "Sunday, 1:30. No light in mooring area."

Then we have one on the earlier watch, someone else's watch, they say, "Light in mooring area not visible."

When was the last time it was noted as being visible, if you can find that? A. On the 15th at 5:30 at night.

Q. That's the 1730 entry, is that correct? A. That's correct.

Q. But that says the gas buoy light was on and only one light was on in the mooring area. A. That's correct.

Q. Does that mean that the barge light was out then?

A. No, it means it was on.

Q. It says the gas buoy light is on. A. Then it says only one light is on in the mooring area, so that would be the light on the barge.

Q. How far was the gas buoy from the mooring area.

A. It is—

Q. Roughly. A. —800 feet.

(95) Q. In other words, you did not consider the gas buoy as being part of the mooring area? A. Yes, I guess that was more or less marking it. It would be just to the east of it, the mooring area, from the gas buoy.

Q. There came a time when the platform, the offshore loading-unloading tanker berth platform was completed, is that correct? A. That's correct.

Kenneth DeFriest, for Defendant, Cross

Q. Can you mark on the chart where the tankers docked and undocked after the platform was constructed? You can do this in red. A. I believe this is the platform, right?

Q. Yes. A. On this side of it.

The Court: Put a capital "T" for tankers.

(Witness complies.)

Q. When you called the MacArthur Airport and got a—something from them, was that a forecast you would get or readings? A. Readings and forecast.

Q. Would you note that in your log, when you called them and got the readings and the forecast? A. Well, yes, because that's when we would write (96) them down.

Q. When you got this information and put it in your log, would you do anything else with it, or just record it? A. We would record it.

Q. You wouldn't get on the phone and call up anyone else and tell them anything about what you had gotten from MacArthur, is that correct? A. If we were expecting a barge or anything, and they were expecting a storm, yeah, I would call somebody about it.

Q. During the period from 0000, December 15, 1972 up until Sunday, when the barge capsized, did you telephone anyone in connection with weather forecasts that you received or readings that you had learned of from MacArthur Airport? A. No. My immediate supervisor, he checks in—you never know when he checks in. 24 hours a day, he calls us frequently, and we pass it on to him, if there was any danger, you know, or anything.

Q. What was his name? A. Earl Espland.

Q. For whom did he work? A. Northville Industries.

Q. Did you state who your employer was during December of 1972? (97) A. Northville Industries.

Mr. Coates: No further questions.

The Court: I don't understand these entries with respect to the light, and by that I mean the light on the barge.

Kenneth DeFriest, for Defendant, Cross

I take it that when you speak of the mooring area you mean the barge?

The Witness: Yes. The barge was out there in the mooring area.

The Court: The gas buoy light is also out in the same area?

The Witness: That's correct.

The Court: Although, perhaps, a couple of hundred yards apart?

The Witness: Correct.

The Court: All right.

Your predecessor on Friday night recorded the gas buoy light as on, "Only one light is on in the mooring area." From that I gather that there previously had been more than one light in the mooring area.

The Witness: I only recall one.

The Court: After midnight, which is to say early Saturday morning, you note, "Checked dock area. Okay." (98) The Witness: At what time?

The Court: 1:30 a.m., and again at 0630 a.m.

That would indicate to me that in the early Saturday morning hours you did not notice a light being off on the barge?

The Witness: That's correct.

The Court: So far as you know, the barge was still out there and the light was still on it?

The Witness: That's correct.

The Court: When you came off duty Saturday morning and you visually saw the barge and the crane?

The Witness: That's correct.

The Court: All right.

Now, the next people on, on Saturday night, on Saturday the 16th, were on during the daylight hours, consequently, they wouldn't particularly—well, I take that back because I notice that the person who was on Saturday afternoon—the name appears to be Gene Schob.

The Witness: That's correct.

Kenneth DeFriest, for Defendant, Cross

The Court: He notes at 1730 Saturday afternoon, "Light in mooring area not visible."

By 5:30 in the afternoon in December, when we are on standard time, it is reasonably dark, isn't it?

The Witness: I would say yes.

(99) Mr. Warner: Was that the portion where it was 1730?

The Court: Yes.

Mr. Warner: It says "Gas buoy light on."

The Court: "Light in mooring area not visible." 5:30 on the—5:30 in the p.m., in the afternoon, on the 16th, appears to be the first time anybody noticed the light in the mooring area not being visible.

The Witness: That's correct.

The Court: Because you earlier said on the 15th.

Mr. Coates: Your Honor, the man who made that entry, "Light in mooring area not visible," was the same man who had seen the light previously, I believe.

The Court: If you mean by "previously" you mean the previous day—

Mr. Coates: Yes.

The Court: —yes, it is the same person.

From a negative standpoint, this is the first indication anything is wrong, that on 5:30 on—late on Saturday afternoon, the light is not visible.

Of course, there are three possibilities:

One is that the light is simply out and there is (100) nothing wrong with the barge.

Another is that the barge has already capsized thereby obscuring the light.

The third is that the barge has not capsized, but has shifted position or sunken enough in the water so that the light is not visible.

Walter Zeltmann, for Defendant, Direct

The next person on duty, who was you, noted that the light was not visible in the mooring area.

All right. I take it that you are—did your predecessor, Mr. Schob, make any particular reference to the fact that there were no lights visible in the mooring area when you came on duty that night?

The Witness: He told me that he couldn't see it.

The Court: Did that cause either you or he to do anything? Or to notify anybody?

The Witness: No, because I believe one other time that the light had blown out—burned out or something, and—

The Court: At that point you couldn't be sure if it wasn't just a light failure.

The Witness: I figured that. I didn't think the seas were that rough at that time, you know, no different.

* * *

(104) WALTER ZELTMANN, called as a witness by the defendant, being first duly sworn, testified as follows:

Direct Examination by Mr. Warner:

Q. Mr. Zeltmann, what is your occupation? A. I am a consultant meteorologist.

* * *

(107) Q. Based upon the materials that you have examined and the reports that you have read have you been able to form an opinion to a point of reasonable scientific certainty as to the weather conditions as they existed in the Long Island Sound area and in the Jacobs Point area vicinity and in the area where there are markings on the chart for the period December 16, 8 a.m., through December 17, 8 a.m.? A. Yes, I have.

Walter Zeltmann, for Defendant, Direct

Q. Would you describe to his Honor what the weather conditions were during that period and in general the wind forces and the like? A. During that period of time there was a strong flow of northwest winds down across all of Long Island Sound, across all of Long Island.

* * *

(108) A. The winds were very strong. They exceeded gale force. They were running at least 25 knots, rose to 50 knots and higher in some instances, during that whole period of time, and they were steadily out of the northwest.

Q. Steadily out of the northwest you say? A. Yes.

* * *

(109) Q. Based upon the documents that you have examined, the reports that you have read, were you able to form an opinion to a point of reasonable scientific certainty as to the sea conditions during this period, particularly from midnight on Saturday until approximately 8 a.m. Sunday morning? (110) A. Yes.

Q. I refer, of course, to the 16th and the 17th of December. A. Yes. During that period of time, under these strong gale force and even stronger, whole gale force winds blowing across the sound from the Connecticut shore towards the Long Island shore, the seas must have been extremely rough.

* * *

(113) Q. In addition, Mr. Zeltmann, were you able to form an opinion to the same degree that I indicated earlier as to the possibility of ice formation on the barge as a result of wind, sea and weather conditions during the period from approximately midnight to 8 a.m. the next morning, the 16th through to the 17th? A. Yes. With the northwest winds coming down it was a very cold arctic air mass and the temperature was dropping through most of the 16th and on the morning of the 17th, between midnight and

Walter Zeltmann, for Defendant, Direct

8 a.m., during that period of time the temperature was in the mid 20's or lower, the air temperature, and with a heavy sea, rough seas of this type, there would be lots of spray blown off the white caps and also caused by the waves crashing into the barge and the platform it was building, and that spray would accrete on some of it, it would accrete on the barge and the platform in the form of ice with those cold temperatures.

* * *

(125) Mr. Warner: Your Honor, I am going to direct the witness' attention to the provisions of the warranty attached to the hull policies, and I thought that your Honor might wish to have the warranty at the time I am doing that.

Q. Now, Mr. Zeltmann, I am going to direct your attention to the storm and heavy weather plan that is attached to the hull policy that is in evidence as Defendant's A.

Have you had a chance to look at that? A. I have looked at it, yes.

* * *

(127) Q. Condition B, Mr. Zeltmann, states that:

"It is defined as an alert condition."

Is there any meaning in meteorological terminology to that term, "alert condition"? A. Meteorologists do not use the term "alert condition."

Q. When you refer to terms that are used in meteorology, are you referring to some source in particular? A. There is a glossary of meteorology which defines the terms used in my profession.

Q. I am handing you a book. Is that the most recent edition of that glossary that you referred to? A. Yes. It is the Glossary of Meteorology, second printing, 1970.

Walter Zeltmann, for Defendant, Direct

Q. That is the most recent one? A. Yes.

Q. During the course of any explanations that you give, if you wish to refer to that glossary, you may.

Now, Mr. Zeltmann, I direct your attention to the phrase, "If conditions are forecast to be quite severe," is there ever a forecast using the terms "quite severe"? (128) A. It is not a term used by meteorologists. They do use the term "severe local storm," but this is not a term used by meteorologists, "quite severe," not a defined term.

(129) Q. Weather forecasts use defined terms in forecasting weather conditions? A. They prefer defined terms.

Q. Under condition C, there is a statement that that condition is defined as "a warning status" a defined meteorological term? A. No, it's not a term used by meteorologists. It has no special definitions used by meteorologists.

Q. And there is also, in that condition, a reference to "severe squall weather." A. There is such things as squalls, but they are not defined as "severe squalls" or otherwise, just squalls.

Q. Going back to condition B, Mr. Zeltmann, it refers to an alert condition, which I read before, with a hurricane or northeast storm well offshore. Can you comment upon the term "northeast storm well offshore"? A. It's a contradiction in terms. By definition a northeast storm on the Atlantic coast has to be affecting the shoreline. If it's well offshore it's not a northeast storm.

Q. The coastal quality of a northeast storm you say is part of its definition? A. Yes. As defined—

* * *

(130) Q. Mr. Zeltmann, is the term northeast storm restricted to any particular coast? A. Well, perhaps I better read the definition as contained in the glossary:

Walter Zeltmann, for Defendant, Direct

"Northeast storm. Also called northeaster or northeast, or nor'easter. A cyclonic storm of the east coast of North America. So-called because the winds over the coastal area are from the northeast. They may occur at any time of the year but are most frequent and most violent between September and April. Northeast storms usually develop in the lower mid latitudes 30 to 40 degrees north within 100 miles east or west of the coastline. They progress generally northward to northeastward and typically attain maximum intensity near New England and the maritime provinces. They nearly always bring precipitation and frequently winds of gale force to the affected coastal regions."

Q. The northeast storm or the nor'easter is a special word for a special storm in a special place, is that right?

(131) A. It's a colloquial term carried over from colonial times, and it's included as a special kind of storm in this glossary.

Q. Mr. Zeltmann, condition B states in regard to the northeast storm, also with regard to the hurricane, but I'm addressing myself only to the northeast storm, it states in regard to that that "heavy swells can be expected from the east."

Can you comment upon that in reference to the map that's on his Honor's bench. A. Yes. The site in question here is—

Q. Mr. Zeltmann, I will hold the map up and then you can point to it. A. The site in question, which is here, is protected from an easterly or northeasterly swell. The only entrance into the sound would come up in this area here between Orient Point and Nantucket Bay, in that area. A swell from the east would tend to affect the Connecticut shore but would not extend down into the site here except by refraction which would greatly diminish its size.

• • •

Walter Zeltmann, for Defendant, Direct

(136) Q. Again directing your attention, Mr. Zeltmann, to the Saturday 8:00 A.M. period to Sunday 8:00 A.M., was there during this period any forecast of a hurricane, Number 1? A. Of a hurricane?

Q. Yes. A. No, there was no hurricane forecast.

Q. When I indicate a hurricane, I am always referring to the site we are talking about. A. Yes.

Q. Was there during this period any forecast of a northeast storm in this site, and the period I am referring to is 8:00 A.M.— A. From 8:00 A.M. on the 16th through 8:00 A.M. on the 17th? No.

Q. Was there a forecast during this period of severe squall weather in the area? A. There was no forecast of squall weather in the area.

Q. There can't be a forecast of severe because that is not an accepted term, is that right? A. By definition there isn't.

Q. Similarly, if there is a forecast of a northeast (137) storm, it would not be forecast as northeast storm well offshore? A. No. As I said, a northeast storm in order to be called a northeast storm would have to affect the coast line by definition.

* * *

(138) By Mr. Warner:

Q. Mr. Zeltmann, I would like to direct your attention now to the period prior to December 16, 8:00 A.M., and I would like to go back to Thursday December 14, 1972.

(139) Mr. Warner: Before proceeding further I would offer to be marked, upon the agreement of Mr. Coates, the weather forecasts for the period Thursday December 14, 1972, 5:00 A.M. reading, and this is Block Island to Manasquan, through December 17, 1972, 11:00 P.M., also for the same area.

* * *

Walter Zeltmann, for Defendant, Direct

(141) You have examined the weather forecasts for the entire period that I just mentioned, is that right, December 14 right through the 17th? A. Yes, I did.

Q. Did it ever occur during this period that there was a forecast for a northeast storm? A. There was one forecast where a northeast wind was predicted.

Q. When did that take place, what is the date? A. This occurred—the forecast was issued as of 11:00 A.M. on December 15, and it calls for northeast to east winds increasing to 25 to 30 knots with some higher gusts this afternoon and tonight.

Q. Does it also make a forecast as to what will follow that? A. Yes, becoming northwesterly 20 to 30 knots with higher gusts on Saturday.

* * *

(143) Q. Mr. Zeltmann, notwithstanding the forecasts we have been discussing, and based upon your analysis of the wind and air charts and any other materials that you feel are relevant, do you have an opinion as to whether in this vicinity that we are talking about a northeast wind did visit? A. There was one short period where a weak northeast wind occurred during the passage of a col between two pressure centers.

Q. When did this northeast wind that you are referring to visit the location? A. The early morning hours of December 16, before the northwest wind set in.

Q. And when did it leave? A. Well, it left shortly after sunrise, when the northwest wind started.

* * *

(144) Q. If you will give me, Mr. Zeltmann, the particular map you want to refer to, I will hold it up so his Honor can see it. A. Yes. This is the map for 1200 Z, 7:00 A.M., December 16, 1972, and it is typical of all of the maps that preceded it during the previous 24 hours.

Walter Zeltmann, for Defendant, Direct

There are two pressure centers, one which is just east of Cape Cod and the other one up in northwestern New York, near the mouth of the—where the Lake Ontario drains into the St. Lawrence River. Between those two there is a flat pressure gradient, where the pressure gradient is weak, and in an area like that the winds drop off, and it is in that area there that for a brief period of time you had some northeast winds, but they were for the most part below gale force, they were only breezes.

Q. Mr. Zeltmann, my last question to you: Would it be correct to say that for this area, for this time period that we have discussed, although at one point there was a forecast of a northeast storm, a northeast storm never occurred? A. There was no northeast storm.

* * *

(147) Q. You gave testimony, sir, that "The seas must have been extremely rough from Connecticut." In gauging the effect of sea, have you ever consulted with what is known as a Beaufort scale? A. I know the Beaufort scale, but it has no relevance in confined waters as far as just estimating the height of the sea.

* * *

(148) The Court: Let me ask the witness. The Beaufort scale transmission of wind and water are generally applied to the ocean, are they not?

The Witness: Yes, that's right. When you use waves to estimate winds or vice-versa, and there is a question of whether you should use them that way, they can (149) only be used in large open areas of the ocean, you can't use that kind of formula in a confined area like Long Island Sound.

* * *

Walter Zeltmann, for Defendant, Direct

(150) The Court: In any event, you view the Beaufort scale as having some reliability for open water and not being easily translatable for a confined body of water and you view the Long Island Sound as a confined body of water?

The Witness: Yes, your Honor.

Mr. Coates: Your Honor, one of the factors that pertains to the buildup of waves is wind. That being one of the factors, I would like to still introduce it into evidence.

The Court: All right, for what it is worth.

* * *

(151) Q. Have you heard any evidence during this trial so far having to do with the manner in which the Barge 136 was moored at the time that it capsized? A. I know nothing about that, nothing at all.

Q. Would knowledge of that have a bearing upon what you had to say about ice accretion? (152) A. No, the spray would be flying from rough seas no matter what the situation was.

* * *

(158) Q. What was the maximum reading you had at Faulkner's Island from the northeast in terms of velocity?

Mr. Warner: For what period, your Honor?

The Court: The period the 14th through the 17th.

A. At one point—this is at midnight on the 15th they reported a northeast 45-knot wind.

The Court: You say midnight, the 16th.

The Witness: Midnight, it was midnight on the night of the 15th-16th.

The Court: Between the 15th and the 16th?

The Witness: Yes.

* * *

Walter Zeltmann, for Defendant, Direct

(165) By the Court:

Q. It seems to me considering what you have said about this area being sheltered from northeast storms that northwest storms, where there is a longer stretch to the wind, everything else considered, is at least equally bad as northeast storms? A. Yes, that is quite correct. A northwest wind blowing across the storm would be more hazardous than any other direction.

(166) Q. Assuming that the weather conditions which existed at Faulkner's Island were identical to those existing a mile or two off shore at Jacob's Point, how would you describe the weather conditions existing on the 16th and 17th? A. Of course, there was a very strong northwest wind.

Q. Strong enough to be called a gale? A. Yes, it was a gale and it rose at times into whole gale category and it was blowing continuously across the Sound. It was building up a heavy sea during that period. I actually have some calculations as to how high that sea might have been, giving a maximum and minimum amount wind speed, if you want them. But they were very heavy seas by the time they reached Jacob Beach.

. . .

(168) *Re-cross Examination by Mr. Coates:*

Q. Yesterday, Mr. Zeltmann, you gave a definition of a northeast storm from the glossary of meteorology, is that correct? A. Yes.

Q. And I quote: "Northeast storms usually develop in the lower mid latitudes, that is 30 degrees to 40 degrees north, within 100 miles east or west of the coastline. They progress generally northward to northeastward."

Would that mean that they come from the south or southwestward direction? (169) A. Yes, they do come from the southwesterly direction usually.

Walter Zeltmann, for Defendant, Re-cross

Q. Do you make a distinction between northeast winds and a northeast storm as used in the context of this definition here? A. Within the context of the definition, a northeast storm originally grew out of a colloquial term which originated in colonial times before the Revolution and it involved a northeast wind as part of the description of the storm. It was a northeaster.

Q. Do you make a distinction between northeast winds and northeast storm as taken out of the glossary of meteorology? A. Distinction, I would say that the implication in the glossary and as the term is used my meteorology is there must be a northeast storm wind on the coast.

Q. Even though the storm comes from the southwest, is that correct? A. Yes. The storm comes from the southwest but because of the counter clockwise rotation of the winds on the northwest quadrant of the storm you would get a northeast wind.

Q. And the storm has defined here even though it comes from the southwest is called a northeast storm or (170) a northeaster, is that correct? A. That's correct.

. . .

The Court: Specifically, however, this particular storm, can it be referred to in meteorological terms as being a northeaster considering all the factors (171) involved?

The Witness: All the factors involved include the fact there was a double center and the other center broke up the pattern on the northwest side of the storm, shunted the winds that might have been northeast to an easterly direction and for only a short period did you have any northeast winds at all as the two storm centers went past.

The Court: That doesn't answer the question. From a meteorological standpoint was the storm that crossed or was in the vicinity of Jacobs Point on the 16th and 17th of December, 1972 a northeaster?

Conrad B. Gosset, for Plaintiff, Direct

The Witness: It was not a northeaster.

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(187) CONRAD B. GOSSET, called as a witness by the plaintiff, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Coates:

Q. Mr. Gosset, where do you reside? A. In Mohican Lake, New York.

Q. What is your business? A. I am a consulting meteorologist.

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(198) The Court: At the time it was getting northeast winds in the Long Island Sound area, the intensity, however, was not great enough to qualify as a storm, was it?

The Witness: Faulkner's Island had winds of 50 knots. That would be 58 miles an hour. That is storm winds. From the east.

The Court: Did Jacobs Point have that substantial winds from that direction?

(199) The Witness: They probably had winds very similar to it. That was about the point where the storm center started intensifying rapidly as it got just to the southeast of Long Island. Then as it moved northeastward along the coast of eastern New England, it intensified very rapidly. The reason that the winds stayed so long out of the northwest is that the storm was still moving and intensifying so your gradient was still tight.

Q. Mr. Gosset, the storm that you have outlined here, and the storm that you have studied, do they fit the glove of the definition that was given from the glossary of meteorology yesterday and today of a northeast storm?

Conrad B. Gosset, for Plaintiff, Direct

A. Yes, sir, because it was a secondary development, moved up along the coast, and it was a typical northeast storm. It had its own circulation.

Q. Did you also review the forecasts in connection with this storm? A. Yes, sir, I did.

Q. The Long Island Sound to Montauk and Block Island forecast? A. Yes.

Q. I show you Exhibit O and ask you to tell his Honor what that is? (200) A. These are the forecasts issued by the National Weather Service starting at 5:00 A. M. December 14, 1972, and going through the forecast prepared at 11:00 P. M., December 17, 1972.

Q. Do you find in those anywhere an indication, forecast, or advice that a northeast storm threatened eastern Long Island Sound—when did that first show, if it did show in the forecast? A. Well, the only indication of a northeast storm is the wind force and wind direction. You couldn't find the phrase "northeast storm" in the forecasts.

Q. Let's put it in the context of the small craft warnings and gale warnings. Where did you first find a small craft warning being put into effect? A. Small craft warnings became effective at 5:00 P. M., December 14. Gale warnings became effective at 11:00 A. M., December 15.

* * *

(201) Q. How about the December 15th at 11:00 A. M.? Do you have that one in there? A. That was December 15 at 11:00 A. M. They forecast gale warnings easterly 30 to 40 knots. Then at 4:30 A. M. on Friday—these aren't in sequence. The wind direction was changed at the next forecast at 5:00 P. M. for west to northwest winds. Stronger gusts of 50 knots or more. That was as of 5:00 P. M. December 16.

The Court: What is the last prediction of northeast winds?

Conrad B. Gosset, for Plaintiff, Cross

The Witness: The last forecast of northeast winds occurred at 11:00 A. M., December 15.

The Court: What is the last occurrence of northeast winds?

The Witness: I say the last forecast for northeast winds was 11:00 A. M. that is not the last occurrence.

The Court: I understand that.

The Witness: The last occurrence—again, I will use Faulkner's Island, because they are the closest. They had northeast winds—they had east winds as late as 1:00 A. M. on December 16.

• • •

(202) The Court: What is their next reading after that, what direction?

The Witness: 4:00 A. M., north at 30 knots. They went from east to north.

• • •

(210) *Cross Examination by Mr. Warner:*

Q. Mr. Gosset, for purposes of my question, I would like you to assume that the barge capsized between approximately four p.m. on Saturday, December 16th, and eight a.m. on Sunday, December 17th, for purposes of this question.

If I were to tell you—tell you to make that assumption, then is it your testimony that the barge capsized in a northeast storm? A. On the back side of a northeast storm.

• • •

(211) Q. Did it capsize in the center of a northeast storm, let's start with that? A. No.

Q. Did it capsize in northeast winds? A. No.

• • •

Q. So that your testimony, if I understand it correctly, is that at the time the barge capsized, proceeding

Conrad B. Gosset, for Plaintiff, Cross

on my assumption, the northeast storm had passed the Jacobs Point area, is that correct? A. The center of the storm had passed.

Q. I will come back to that in a minute.

You stated earlier, Mr. Gosset, when you were at the blackboard, that at Faulkner's Island at sometime, I think you said, around midnight, or thereabouts, on Friday, December 15th, that at the Faulkner's Island there was a reading of winds 58 knots? A. No, sir. I said 50 knots.

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(212) Q. In what direction was that? A. East.

• • •

Q. Was there any reading at Faulkner's Island after that period of northeast winds? A. After east?

Q. That's right. A. The next reading was north, three hours later.

Q. Was there any reading for the balance of that weekend of northeast winds from Faulkner's Island? A. No, sir.

• • •

(238) The Court: However, I take it that from the standpoint of your definition, the fact that there was a short period when northeast material winds were actually experienced is not essential to it, and you would meteorologically call that a northeast storm, even if the only intense winds had been the latter winds, which actually came out of the northwest?

The Witness: Yes, sir.

By Mr. Warner:

Q. So that—I may be repeating, but your definition of northeast storm as a meteorologist includes (239) winds from the northwest, is that correct? A. Yes, sir.

Q. Now, I ask you to look at the glossary of meteorology that you indicated is the lexicon of meteorology, and

Robert H. Smith, for Plaintiff, Direct

I ask you whether there is any mention in the definition of northeast storm in that glossary of northwest winds, yes or no? A. Of northwest winds?

Q. Yes. A. Or northwester?

Q. Or northeast storm? A. Northeaster.

Q. Is there any mention of northwest winds being a characteristic of that storm? A. No, sir.

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(266) ROBERT H. SMITH, called as a witness by the plaintiff, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Coates:

Q. Captain Smith, for whom do you work? A. I work for Hull & Cargo Surveyors, Inc.

(267) Q. In what capacity do you work for Hull & Cargo Surveyors, Inc.? A. To carry out surveys of marine equipment or operations, either for insurance underwriters, who are interested in insuring such things or for insurance agents, who are trying to place insurance, or for owners who are offering their equipment for use.

Q. I believe yesterday the Court inquired as to whether or not there was a relationship between Hull & Cargo Surveyors, Inc., and the Continental Insurance Company. I believe there is a relationship, is that correct? A. Hull & Cargo Surveyors is a corporation with separate offices and a separate address, who is open to do business for anyone who finds our services.

We maintain our own files and they are completely privileged to those who ask for our services or to those whom the people that ask for our services tells to give them.

Robert H. Smith, for Plaintiff, Direct

The stock of Hull & Cargo Surveyors, Inc. to the best of my knowledge, is 100 per cent owned by Marine Office Appleton & Cox, which is one of the Continental Companies.

Mr. Warner: Your Honor, I move to strike that answer prior to the stock. The answer from the point of "The stock of Hull & Surveyors is 100 per cent owned" and so (268) on is responsive, but prior that I move to strike—

The Court: If it didn't come in now it would come in in the next question, and it is apparent that they are owned by a company which in turn is part of—who own who, Continental owns Appleton & Cox or does Appleton & Cox own—

The Witness: Continental owns Marine Office Appleton & Cox.

The Court: You do do work for other clients on an independent basis?

The Witness: Yes, your Honor.

By Mr. Coates:

Q. In other words, it is an investment type operation, would you say? A. That is correct.

Mr. Warner: That is correct.

The Court: Improper. He hasn't said they don't do work for Appleton & Cox, and indeed, the work done here was for Appleton & Cox.

Q. Captain Smith, how long have you worked for Hull & Cargo Surveyors, Inc.? A. Since its inception, I believe that was seven years now.

Q. Would you tell the Court your usual duties in (269) working for Hull & Cargo Surveyors, Inc.? A. Basically, we are marine surveyors, both for, I would say, a majority of our work is for insurance underwriters, either the people that want to write a policy

Walter Zeltmann, for Defendant, Direct

Q. That is the most recent one? A. Yes.

Q. During the course of any explanations that you give, if you wish to refer to that glossary, you may.

Now, Mr. Zeltmann, I direct your attention to the phrase, "If conditions are forecast to be quite severe," is there ever a forecast using the terms "quite severe"? (128) A. It is not a term used by meteorologists. They do use the term "severe local storm," but this is not a term used by meteorologists, "quite severe," not a defined term.

(129) Q. Weather forecasts use defined terms in forecasting weather conditions? A. They prefer defined terms.

Q. Under condition C, there is a statement that that condition is defined as "a warning status" a defined meteorological term? A. No, it's not a term used by meteorologists. It has no special definitions used by meteorologists.

Q. And there is also, in that condition, a reference to "severe squall weather." A. There is such things as squalls, but they are not defined as "severe squalls" or otherwise, just squalls.

Q. Going back to condition B, Mr. Zeltmann, it refers to an alert condition, which I read before, with a hurricane or northeast storm well offshore. Can you comment upon the term "northeast storm well offshore"? A. It's a contradiction in terms. By definition a northeast storm on the Atlantic coast has to be affecting the shoreline. If it's well offshore it's not a northeast storm.

Q. The coastal quality of a northeast storm you say is part of its definition? A. Yes. As defined—

* * *

(130) Q. Mr. Zeltmann, is the term northeast storm restricted to any particular coast? A. Well, perhaps I better read the definition as contained in the glossary:

Walter Zeltmann, for Defendant, Direct

"Northeast storm. Also called northeaster or northeast, or nor'easter. A cyclonic storm of the east coast of North America. So-called because the winds over the coastal area are from the northeast. They may occur at any time of the year but are most frequent and most violent between September and April. Northeast storms usually develop in the lower mid latitudes 30 to 40 degrees north within 100 miles east or west of the coastline. They progress generally northward to northeastward and typically attain maximum intensity near New England and the maritime provinces. They nearly always bring precipitation and frequently winds of gale force to the affected coastal regions."

Q. The northeast storm or the nor'easter is a special word for a special storm in a special place, is that right?

(131) A. It's a colloquial term carried over from colonial times, and it's included as a special kind of storm in this glossary.

Q. Mr. Zeltmann, condition B states in regard to the northeast storm, also with regard to the hurricane, but I'm addressing myself only to the northeast storm, it states in regard to that that "heavy swells can be expected from the east."

Can you comment upon that in reference to the map that's on his Honor's bench. A. Yes. The site in question here is—

Q. Mr. Zeltmann, I will hold the map up and then you can point to it. A. The site in question, which is here, is protected from an easterly or northeasterly swell. The only entrance into the sound would come up in this area here between Orient Point and Nantucket Bay, in that area. A swell from the east would tend to affect the Connecticut shore but would not extend down into the site here except by refraction which would greatly diminish its size.

• • •

Walter Zeltmann, for Defendant, Direct

(136) Q. Again directing your attention, Mr. Zeltmann, to the Saturday 8:00 A.M. period to Sunday 8:00 A.M., was there during this period any forecast of a hurricane, Number 1? A. Of a hurricane?

Q. Yes. A. No, there was no hurricane forecast.

Q. When I indicate a hurricane, I am always referring to the site we are talking about. A. Yes.

Q. Was there during this period any forecast of a northeast storm in this site, and the period I am referring to is 8:00 A.M.— A. From 8:00 A.M. on the 16th through 8:00 A.M. on the 17th? No.

Q. Was there a forecast during this period of severe squall weather in the area? A. There was no forecast of squall weather in the area.

Q. There can't be a forecast of severe because that is not an accepted term, is that right? A. By definition there isn't.

Q. Similarly, if there is a forecast of a northeast (137) storm, it would not be forecast as northeast storm well offshore? A. No. As I said, a northeast storm in order to be called a northeast storm would have to affect the coast line by definition.

* * *

(138) By Mr. Warner:

Q. Mr. Zeltmann, I would like to direct your attention now to the period prior to December 16, 8:00 A.M., and I would like to go back to Thursday December 14, 1972.

(139) Mr. Warner: Before proceeding further I would like to be marked, upon the agreement of Mr. Zeltmann, the weather forecasts for the period Thursday December 14, 1972, 5:00 A.M. reading, and this is Block Island to Manasquan, through December 17, 1972, 11:00 P.M., also for the same area.

* * *

Walter Zeltmann, for Defendant, Direct

(141) You have examined the weather forecasts for the entire period that I just mentioned, is that right, December 14 right through the 17th? A. Yes, I did.

Q. Did it ever occur during this period that there was a forecast for a northeast storm? A. There was one forecast where a northeast wind was predicted.

Q. When did that take place, what is the date? A. This occurred—the forecast was issued as of 11:00 A.M. on December 15, and it calls for northeast to east winds increasing to 25 to 30 knots with some higher gusts this afternoon and tonight.

Q. Does it also make a forecast as to what will follow that? A. Yes, becoming northwesterly 20 to 30 knots with higher gusts on Saturday.

* * *

(143) Q. Mr. Zeltmann, notwithstanding the forecasts we have been discussing, and based upon your analysis of the wind and air charts and any other materials that you feel are relevant, do you have an opinion as to whether in this vicinity that we are talking about a northeast wind did visit? A. There was one short period where a weak northeast wind occurred during the passage of a col between two pressure centers.

Q. When did this northeast wind that you are referring to visit the location? A. The early morning hours of December 16, before the northwest wind set in.

Q. And when did it leave? A. Well, it left shortly after sunrise, when the northwest wind started.

* * *

(144) Q. If you will give me, Mr. Zeltmann, the particular map you want to refer to, I will hold it up so his Honor can see it. A. Yes. This is the map for 1200 Z, 7:00 A.M., December 16, 1972, and it is typical of all of the maps that preceded it during the previous 24 hours.

Walter Zeltmann, for Defendant, Direct

There are two pressure centers, one which is just east of Cape Cod and the other one up in northwestern New York, near the mouth of the—where the Lake Ontario drains into the St. Lawrence River. Between those two there is a flat pressure gradient, where the pressure gradient is weak, and in an area like that the winds drop off, and it is in that area there that for a brief period of time you had some northeast winds, but they were for the most part below gale force, they were only breezes.

Q. Mr. Zeltmann, my last question to you: Would it be correct to say that for this area, for this time period that we have discussed, although at one point there was a forecast of a northeast storm, a northeast storm never occurred? A. There was no northeast storm.

* * *

(147) Q. You gave testimony, sir, that "The seas must have been extremely rough from Connecticut." In gauging the effect of sea, have you ever consulted with what is known as a Beaufort scale? A. I know the Beaufort scale, but it has no relevance in confined waters as far as just estimating the height of the sea.

* * *

(148) The Court: Let me ask the witness. The Beaufort scale transmission of wind and water are generally applied to the ocean, are they not?

The Witness: Yes, that's right. When you use waves to estimate winds or vice-versa, and there is a question of whether you should use them that way, they can (149) only be used in large open areas of the ocean, you can't use that kind of formula in a confined area like Long Island Sound.

* * *

Walter Zeltmann, for Defendant, Direct

(150) The Court: In any event, you view the Beaufort scale as having some reliability for open water and not being easily translatable for a confined body of water and you view the Long Island Sound as a confined body of water?

The Witness: Yes, your Honor.

Mr. Coates: Your Honor, one of the factors that pertains to the buildup of waves is wind. That being one of the factors, I would like to still introduce it into evidence.

The Court: All right, for what it is worth.

* * *

(151) Q. Have you heard any evidence during this trial so far having to do with the manner in which the Barge 136 was moored at the time that it capsized? A. I know nothing about that, nothing at all.

Q. Would knowledge of that have a bearing upon what you had to say about ice accretion? (152) A. No, the spray would be flying from rough seas no matter what the situation was.

* * *

(158) Q. What was the maximum reading you had at Faulkner's Island from the northeast in terms of velocity?

Mr. Warner: For what period, your Honor?

The Court: The period the 14th through the 17th.

A. At one point—this is at midnight on the 15th they reported a northeast 45-knot wind.

The Court: You say midnight, the 16th.

The Witness: Midnight, it was midnight on the night of the 15th-16th.

The Court: Between the 15th and the 16th?

The Witness: Yes.

* * *

Walter Zeltmann, for Defendant, Direct

(165) By the Court:

Q. It seems to me considering what you have said about this area being sheltered from northeast storms that northwest storms, where there is a longer stretch to the wind, everything else considered, is at least equally bad as northeast storms? A. Yes, that is quite correct. A northwest wind blowing across the storm would be more hazardous than any other direction.

(166) Q. Assuming that the weather conditions which existed at Faulkner's Island were identical to those existing a mile or two off shore at Jacob's Point, how would you describe the weather conditions existing on the 16th and 17th? A. Of course, there was a very strong northwest wind.

Q. Strong enough to be called a gale? A. Yes, it was a gale and it rose at times into whole gale category and it was blowing continuously across the Sound. It was building up a heavy sea during that period. I actually have some calculations as to how high that sea might have been, giving a maximum and minimum amount wind speed, if you want them. But they were very heavy seas by the time they reached Jacob Beach.

. . .

(168) *Re-cross Examination by Mr. Coates:*

Q. Yesterday, Mr. Zeltmann, you gave a definition of a northeast storm from the glossary of meteorology, is that correct? A. Yes.

Q. And I quote: "Northeast storms usually develop in the lower mid latitudes, that is 30 degrees to 40 degrees north, within 100 miles east or west of the coastline. They progress generally northward to northeastward."

Would that mean that they come from the south or southwestward direction? (169) A. Yes, they do come from the southwesterly direction usually.

Walter Zeltmann, for Defendant, Re-cross

Q. Do you make a distinction between northeast winds and a northeast storm as used in the context of this definition here? A. Within the context of the definition, a northeast storm originally grew out of a colloquial term which originated in colonial times before the Revolution and it involved a northeast wind as part of the description of the storm. It was a northeaster.

Q. Do you make a distinction between northeast winds and northeast storm as taken out of the glossary of meteorology? A. Distinction, I would say that the implication in the glossary and as the term is used my meteorology is there must be a northeast storm wind on the coast.

Q. Even though the storm comes from the southwest, is that correct? A. Yes. The storm comes from the southwest but because of the counter clockwise rotation of the winds on the northwest quadrant of the storm you would get a northeast wind.

Q. And the storm has defined here even though it comes from the southwest is called a northeast storm or (170) a northeaster, is that correct? A. That's correct.

• • •

The Court: Specifically, however, this particular storm, can it be referred to in meteorological terms as being a northeaster considering all the factors (171) involved?

The Witness: All the factors involved include the fact there was a double center and the other center broke up the pattern on the northwest side of the storm, shunted the winds that might have been northeast to an easterly direction and for only a short period did you have any northeast winds at all as the two storm centers went past.

The Court: That doesn't answer the question. From a meteorological standpoint was the storm that crossed or was in the vicinity of Jacobs Point on the 16th and 17th of December, 1972 a northeaster?

Conrad B. Gosset, for Plaintiff, Direct

The Witness: It was not a northeaster.

* * *

(187) CONRAD B. GOSSET, called as a witness by the plaintiff, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Coates:

Q. Mr. Gosset, where do you reside? A. In Mohican Lake, New York.

Q. What is your business? A. I am a consulting meteorologist.

* * *

(198) The Court: At the time it was getting northeast winds in the Long Island Sound area, the intensity, however, was not great enough to qualify as a storm, was it?

The Witness: Faulkner's Island had winds of 50 knots. That would be 58 miles an hour. That is storm winds. From the east.

The Court: Did Jacobs Point have that substantial winds from that direction?

(199) The Witness: They probably had winds very similar to it. That was about the point where the storm center started intensifying rapidly as it got just to the southeast of Long Island. Then as it moved northeastward along the coast of eastern New England, it intensified very rapidly. The reason that the winds stayed so long out of the northwest is that the storm was still moving and intensifying so your gradient was still tight.

Q. Mr. Gosset, the storm that you have outlined here, and the storm that you have studied, do they fit the glove of the definition that was given from the glossary of meteorology yesterday and today of a northeast storm?

Conrad B. Gosset, for Plaintiff, Direct

A. Yes, sir, because it was a secondary development, moved up along the coast, and it was a typical northeast storm. It had its own circulation.

Q. Did you also review the forecasts in connection with this storm? A. Yes, sir, I did.

Q. The Long Island Sound to Montauk and Block Island forecast? A. Yes.

Q. I show you Exhibit O and ask you to tell his Honor what that is? (200) A. These are the forecasts issued by the National Weather Service starting at 5:00 A. M. December 14, 1972, and going through the forecast prepared at 11:00 P. M., December 17, 1972.

Q. Do you find in those anywhere an indication, forecast, or advice that a northeast storm threatened eastern Long Island Sound—when did that first show, if it did show in the forecast? A. Well, the only indication of a northeast storm is the wind force and wind direction. You couldn't find the phrase "northeast storm" in the forecasts.

Q. Let's put it in the context of the small craft warnings and gale warnings. Where did you first find a small craft warning being put into effect? A. Small craft warnings became effective at 5:00 P. M., December 14. Gale warnings became effective at 11:00 A. M., December 15.

. . .

(201) Q. How about the December 15th at 11:00 A. M.? Do you have that one in there? A. That was December 15 at 11:00 A. M. They forecast gale warnings easterly 30 to 40 knots. Then at 4:30 A. M. on Friday—these aren't in sequence. The wind direction was changed at the next forecast at 5:00 P. M. for west to northwest winds. Stronger gusts of 50 knots or more. That was as of 5:00 P. M. December 16.

The Court: What is the last prediction of northeast winds?

Conrad B. Gosset, for Plaintiff, Cross

The Witness: The last forecast of northeast winds occurred at 11:00 A. M., December 15.

The Court: What is the last occurrence of northeast winds?

The Witness: I say the last forecast for northeast winds was 11:00 A. M., that is not the last occurrence.

The Court: I understand that.

The Witness: The last occurrence—again, I will use Faulkner's Island, because they are the closest. They had northeast winds—they had east winds as late as 1:00 A. M. on December 16.

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(202) The Court: What is their next reading after that, what direction?

The Witness: 4:00 A. M., north at 30 knots. They went from east to north.

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(210) *Cross Examination by Mr. Warner:*

Q. Mr. Gosset, for purposes of my question, I would like you to assume that the barge capsized between approximately four p.m. on Saturday, December 16th, and eight a.m. on Sunday, December 17th, for purposes of this question.

If I were to tell you—tell you to make that assumption, then is it your testimony that the barge capsized in a northeast storm? A. On the back side of a northeast storm.

• • •

(211) Q. Did it capsize in the center of a northeast storm, let's start with that? A. No.

Q. Did it capize in northeast winds? A. No.

• • •

Q. So that your testimony, if I understand it correctly, is that at the time the barge capsized, proceeding

Conrad B. Gosset, for Plaintiff, Cross

on my assumption, the northeast storm had passed the Jacobs Point area, is that correct? A. The center of the storm had passed.

Q. I will come back to that in a minute.

You stated earlier, Mr. Gosset, when you were at the blackboard, that at Faulkner's Island at sometime, I think you said, around midnight, or thereabouts, on Friday, December 15th, that at the Faulkner's Island there was a reading of winds 58 knots? A. No, sir. I said 50 knots.

. . .

(212) Q. In what direction was that? A. East.

. . .

Q. Was there any reading at Faulkner's Island after that period of northeast winds? A. After east?

Q. That's right. A. The next reading was north, three hours later.

Q. Was there any reading for the balance of that weekend of northeast winds from Faulkner's Island? A. No, sir.

. . .

(238) The Court: However, I take it that from the standpoint of your definition, the fact that there was a short period when northeast material winds were actually experienced is not essential to it, and you would meteorologically call that a northeast storm, even if the only intense winds had been the latter winds, which actually came out of the northwest?

The Witness: Yes, sir.

By Mr. Warner:

Q. So that—I may be repeating, but your definition of northeast storm as a meteorologist includes (239) winds from the northwest, is that correct? A. Yes, sir.

Q. Now, I ask you to look at the glossary of meteorology that you indicated is the lexicon of meteorology, and

Robert H. Smith, for Plaintiff, Direct

I ask you whether there is any mention in the definition of northeast storm in that glossary of northwest winds, yes or no? A. Of northwest winds?

Q. Yes. A. Or northwester?

Q. Or northeast storm? A. Northeaster.

Q. Is there any mention of northwest winds being a characteristic of that storm? A. No, sir.

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Q. I believe yesterday the Court inquired as to whether or not there was a relationship between Hull & Cargo Surveyors, Inc., and the Continental Insurance Company. I believe there is a relationship, is that correct? A. Hull & Cargo Surveyors is a corporation with separate offices and a separate address, who is open to do business for anyone who finds our services.

We maintain our own files and they are completely privileged to those who ask for our services or to those whom the people that ask for our services tells to give them.

Robert H. Smith, for Plaintiff, Direct

The stock of Hull & Cargo Surveyors, Inc. to the best of my knowledge, is 100 per cent owned by Marine Office Appleton & Cox, which is one of the Continental Companies.

Mr. Warner: Your Honor, I move to strike that answer prior to the stock. The answer from the point of "The stock of Hull & Surveyors is 100 per cent owned" and so (268) on is responsive, but prior that I move to strike—

The Court: If it didn't come in now it would come in in the next question, and it is apparent that they are owned by a company which in turn is part of—who own who, Continental owns Appleton & Cox or does Appleton & Cox own—

The Witness: Continental owns Marine Office Appleton & Cox.

The Court: You do do work for other clients on an independent basis?

The Witness: Yes, your Honor.

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Q. In other words, it is an investment type operation, would you say? A. That is correct.

Mr. Warner: That is correct.

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Q. Captain Smith, how long have you worked for Hull & Cargo Surveyors, Inc.? A. Since its inception, I believe that was seven years now.

Q. Would you tell the Court your usual duties in (269) working for Hull & Cargo Surveyors, Inc.? A. Basically, we are marine surveyors, both for, I would say, a majority of our work is for insurance underwriters, either the people that want to write a policy

Robert H. Smith, for Plaintiff, Direct

and want to look at something before they write it to see whether it is adequate for the intended purpose, or after a loss occurs we will go out on that. Occasionally, we will be requested by an insurance broker to look at something which he might want to place on the market, or occasionally, an owner will want to have a piece of equipment or an operation assessed.

There are occasions when we would do a valuation survey, possibly for a bank or for some tax thing.

Q. How about the insurance risk evaluation survey, do you do those, also? A. We will do both loss prevention surveys and risk evaluation. Is it adequate? What are the things involved? What is needed?

Q. Did there come a time in December of 1972 when you were notified that a barge #136 had capsized? A. Yes.

Q. How did you receive notice of that? A. We received, if I recall, a telephone call on the Monday morning. I believe that was the 18th, 19th.

(270) Q. Captain Smith, I show you what has been pre-marked as Plaintiff's Exhibit 7. It is a report that he issued, and I would like him to be able to refresh his recollection, from that.

The Court: If you are not going to offer it in evidence, it should be marked for identification, in any event.

Mr. Coates: I am going to end up offering it in evidence, your Honor.

The Court: What number does it bear?

Mr. Coates: It bears number 7. It is dated January 8, 1973.

A. December 18 we received a telephone call at 9:30 A. M. from a Mr. James Armitage, who was broker on this Hersent Offshore, or DeLong Corporation, as that was known at that time, I believe, that this barge had

Robert H. Smith, for Plaintiff, Direct

capsized in the Long Island Sound off the Northville Oil Terminal.

Q. What did you do in connection with that telephone call? A. I called out to the Northville Terminal and then later drove out.

Q. Who did you speak to when you called out there, if you recall? A. Mr. Robert Green, Superintendent.

(271) Q. Did you meet with him when you got out to Northville? A. Yes, I did. I got out there, it seems to me, about noontime.

Q. Was anyone else present when you met with him? A. Yes, sir, I believe Mr. Miller was present there and there were some other people, there was a Captain McKay of the Northville Terminal, a kind of a marine manager—

Q. When you say Mr. Miller, we have had two Mr. Millers identified in this trial, one was a diver and one was the Mr. Miller who is in court. Was it one or both of them that you are referring to here? A. I believe it was Mr. Miller that was in court here that I met that time. I never met the diver, Mr. Miller, personally. I talked with him on the telephone.

Q. Did Mr. Green talk to you concerning the loss and the circumstances giving rise to it? A. Yes, he did.

Q. What did he say to you and what did you say to him in substance?

Mr. Warner: Objection.

The Court: What is the nature of the objection?

Mr. Warner: The objection is it is a conclusion without the introduction into—the introduction into (272) evidence of a conclusion of causation without the qualification—

The Court: We don't know what he said yet. We don't know whether it will be a conclusion. I thought you were objecting because of the hear-say aspects of it.

Robert H. Smith, for Plaintiff, Direct

As hearsay it could be an admission against interest, and after he has given us the testimony, I will decide whether or not it was a conclusion beyond the capabilities of the witness.

Mr. Warner: Your Honor, I guess I had misunderstood, I thought that the question was did Mr. Green give you his conclusions concerning—

The Court: He said what did he say to you and what did you say to him in substance, that is the question.

Mr. Coates: About the circumstances. Furthermore, your Honor, Mr. Green, concerning whose conversations he is about to testify, was examined, and you will have his deposition to read.

The Court: All right.

Tell us what you and Mr. Green said to each other on that occasion.

The Witness: Well, I asked him what happened. I did state that I had been sent out to act as an advisor to him, to give him the benefit of any professional knowledge (273) I had by way of advice. He—

Q. In other words— A. That we weren't out to take over.

Q. You weren't out directing operations, is that correct?

Mr. Warner: Objection, your Honor.

The Court: Don't lead the witness. Just tell us what occurred.

A. Mr. Green stated that they had worked on Thursday the normal way on the construction of this platform, that on Friday, the 15th, the crew had gone out, but because of the weather and the rough seas it was impossible to do any work.

(274) Q. Did he describe how the barge was moored?

A. He stated all openings were closed, that he checked

Robert H. Smith, for Plaintiff, Direct

them himself on Thursday. Some minor dewatering had been done in various compartments so that the barge was dry, and that the boom was lowered down into its cradle but was not further secured.

Q. Did he say whether or not it was feasible to secure the boom with tie-lines? A. He didn't say. He said they didn't do it.

Q. Did he describe how the barge was moored, and for purposes of refreshing your recollection I refer you to page 3, if you need to, of your report—how it was moored at the construction site? A. Yes. This was verified later at the inspection, when we went out there, but the crane was moored with four $1\frac{1}{8}$ inch wires. Three of them led out to 30-ton concrete blocks and one of them led out to an angle and to an anchor.

The barge was—well, the moorings were put, oh, at more or less four diagonal directions, and basically it was inside the construction.

The stern, as I recall, was—

Q. Let's—I think it would be easier to talk about the north end and the south end, because different (275) people have called the bow the stern and vice-versa—

The Court: I take it, on a barge of this nature that the bow and the stern is not of any great consequence?

By Mr. Coates:

Q. Was the crane at one end of the barge as opposed to the other? A. The crane was at one end of the barge.

Q. Could we talk about it in terms of the crane end—let me ask this, was there a house trailer? A. Yes.

Q. Was that at the end opposite the crane? A. If I recall, that was at the end opposite the crane.

Q. Maybe you could describe it in terms of the crane end or the other end, the house trailer end. A. Could I draw a sketch? Would that be easier?

Robert H. Smith, for Plaintiff, Direct

Mr. Coates: Yes.

Q. Do it on the blackboard. A. In fact, I have a sketch that I made at the time in my rough notes.

Mr. Coates: I think that is in the exhibit.

A. Let's start with what the barge looks like somewhat.

(276) The Court: This is a side view?

The Witness: This would be a side view of the barge. It was square-ended. If you looked at it on the end it would be pretty much like this.

Looking down on it, on the deck, it would look approximately like that. They had fairleads and somewhat port and starboard on each side they had double drum winches run by diesel motors.

Mr. Warner: May I ask that the witness draw a compass north south on the side.

The Court: If you know which direction—first mark where the crane base is so that we start off with that on it. Put the crane base on that picture. Show the crane boom coming away from it.

The Witness: This is a wooden mat that was set on the—well, we will say the crane end of the barge, and I will just try and draw in the crawler treads and the crane body.

The Court: Draw the boom coming away.

The Witness: The boom extended up this way.

The Court: Now, orient us, if you can, in terms of north, east, south and west, keeping in mind that Jacobs Point is on a piece of land running approximately east-west.

(277) Am I correct on that, gentlemen, that Jacobs Point is on a piece of Long Island that runs almost east-west?

Mr. Coates: It might be slightly northeasterly and southwesterly.

Robert H. Smith, for Plaintiff, Direct

The Court: Hand me up the chart.

The small bit of land mass directly at Jacobs Point is almost east-west. Leading away from Jacobs Point it declines slightly south of west, but not much, and a couple of hundred yards, or maybe even a quarter to a half mile away it then starts up to the east northeast. However, roughly speaking, for the area we are dealing with, according to this chart, the shore runs roughly east to west.

The Witness: That black and white copy of this just misses a little bit of the face.

Now, the bow end with the crane on—unfortunately, I have got this upside down—was towards the platform. I call that bow crane on this sketch, and I call this the stern in this sketch.

The Court: Is the barge moored offshore or in-shore from the platform it is working on?

The Witness: It is moored inshore.

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(279) The Court: Your positioning of this is drawn from the description given to you by Green, plus the position of the capsized barge itself?

The Witness: Yes, sir. When I was out after the barge capsized, I lined it up with the magnetic compass on the crew boat.

The Court: You took the bottom of the barge and took bearings on that. Did Green tell you that the barge was still in the same position relative to the shore as it had been before capsizing?

The Witness: It was still moored to the mooring and course and so basically it had to be. I mean—

(280) The Court: None of the mooring of course had broken during or after capsizing?

The Witness: No. I can spot in the position of those as we have sighted them when the barge was capsized.

Robert H. Smith, for Plaintiff, Direct

By Mr. Coates:

Q. Could you do that with an estimate of the length of scope of wire or whatever it was that was used to go out to the anchors and moorings? A. There was one from the bow, which led over this way and that I have marked on this thing was an anchor. I have marked here one thousand feet.

There was one that leads from this side over this way. It goes between these and has got 30 ton block, 500 feet of chain. And then this is also marked 1000 feet of $1\frac{1}{8}$ inch wire.

Q. Captain Smith, is that what you found after it flipped? A. This is after it flipped.

Q. So rightside up— A. Rightside up these wires would have been uncrossed?

Q. Right. A. Now, after it flipped, the two stern mooring wires were not crossed.

• • •

(286) By Mr. Coates:

Q. Captain Smith, assuming the mooring rig which you diagramed here as existing at the time of the capsize, would that permit the barge to swing and head into the seas if there was wind and wave action.

The Court: I think you will have to tell him from what direction the wind and waves came.

Mr. Warner: I object.

Q. From any direction.

Mr. Warner: I object.

The Court: I will allow it, if you make it clear you are asking from any direction, but you should say from which direction. I could see from the way the thing is drawn that if your winds were from the south she wouldn't be able to swing very much.

Robert H. Smith, for Plaintiff, Direct

By Mr. Coates:

Q. If the winds were from the east, north, west or south or any other quadrant could it swing with that mooring arrangement? A. The barge could not tail very much with that mooring arrangement. It was quite fixed in position. Normally on a mooring, any floating ship or barge or whatever, will tend to find the easiest position to ride, by swinging around a bit on its anchor line. If you do (287) restrict that motion, you possibly can induce heavier rolling and more problems.

* * *

(289) *Direct Examination by Mr. Coates:*

Q. Did you have a conversation with Mr. Green concerning the hatches on the barge? A. After the diver had gone under, the original dive—I believe that was Mr. Miller, the other Mr. Miller, he came back and said that some hatch covers were missing and some were hanging on chains and some were (290) loose.

I asked Mr. Miller—Mr. Green about that, and he said, well the threads must have worn, which I—the only threads connected with that hatch cover would be that center securing bolt that goes down to the—

Q. Assuming the barge flipped, and it did flip, would the upside down weight of the hatch covers themselves cause these hatches to come loose if they had been properly secured? A. No, it wouldn't.

Q. Were you provided with a list of the equipment that was on board? A. After the sinking, yes. They gave us a list of what was on it to the best of their knowledge at the time of the sinking.

Q. Could you tell the Court what the principal equipment was that was on board, and weights, if you know them? A. The principal piece of equipment was the Manitowoc 4100W Vicon crane, which is 182 tons.

Robert H. Smith, for Plaintiff, Direct

I see we have got a one pile driver hammer, Con-marco 300. There is a weight here shown of 25 tons. There is another diesel hammer, Coby Iron Works, KB 60, weight, 25 tons. There is a Gardner Denver 1200 (291) cubic feet a minute compressor. I have just put in twelve tons. 30 Kw diesel generator, three tons. A four welding machine. I put in eight tons. There was one personnel trailer. I put in six tons. That doesn't sound—unless there were stores or things in it. Storage boxes six tons. Fuel tanks, twenty tons. They were mounted on deck.

Q. Yes. A. Slings, equipment, so forth, I put another ten tons. That's over and above the weight of the barge and the wooden pad that was on it.

The Court: Was the top of the barge completely flat or did it have railings around the side?

The Witness: Completely flat, flush deck barge.

The Court: And all of this equipment sat on the flush deck, none of it was sunk down into the hull?

The Witness: No, all on the deck.

• • •

(299) By Mr. Coates:

Q. Captain Smith, going back to the mooring arrangements for a moment, how were the vessel end of the mooring arrangements attached to the ship, in other words, not the mooring or the anchor end, but how was it done aboard the barge itself? A. It came through fairleads, and they were attached onto the drums of what are known as skagit winches, they are diesel driven double drum winches, and the wire is reeled on the drum of that. By operating a clutching and locking mechanism you can back out or haul in on the different cables individually.

Q. In other words, to a certain extent, the barge could be moved around by controls and winches aboard

Robert H. Smith, for Plaintiff, Direct

the barge itself? A. Yes. It could be—within the area bounded by the four moorings. It could be shifted by pulling and slacking off on those cables.

• • •

(302) By Mr. Coates:

Q. What was the length of cable on each winch that was involved in the lines running out to the anchor on the three moorings? A. According to my original survey, it was 1400 feet on each drum.

The Court: When did they shorten it to a thousand?

The Witness: They would to position the barge, your Honor, they would move it back and forth. I have no idea, actually, when they did that.

(303) The Court: Is it the length of the scope of the rope or the angles on which it was secured that, in your opinion, made it less maneuverable in the seas than it should have been?

The Witness: It was the scope of the two shorter wires which made it less maneuverable. The angle didn't help too much.

The Court: What was the scope on those two shorter wires the first time you saw it when it was still afloat?

The Witness: I do not recall, your Honor. They were working at the time, they were probably close up to those pilings and the scope on the after ones was further out.

The Court: The scope on the bow crane end then would have been shorter at that point?

The Witness: Would have been shorter, yes. They would have to go in on that to work.

The Court: I thought you said the scope on the bow lines was 1400 feet the first time you saw it.

The Witness: No, your Honor. The amount of wire on each drum is 1400.

The Court: Just the amount of wire on the drum—

Robert H. Smith, for Plaintiff, Cross

(304) The Witness: The total wire was 1400 feet on each drum.

The Court: Including the two after ones that only had 100 or 150 feet out?

The Witness: Yes, your Honor.

The Court: I am assuming that those large concrete blocks didn't get shifted around prior to the time of capsizing, and consequently, the amount of wire out, while you could alternate it from bow to stern, the total amount out on the combined length, would have to be fairly constant, would it not?

The Witness: In normal conditions, the—of course you could have slacked the shorter ones completely off, in this instance, and then the barge could have tailed well around, so she could have faced anything from a north-east to a northwest sea.

The Court: But assuming they keep the same angle on the chains, as they take in and pull it closer to the pilings they have to let out on the stern end; conversely, as they let out from the pilings and tail off toward the stern, if they are keeping the same angle on the chain, they have to be taking in?

The Witness: Yes. Of course, as they slacked off the angle would decrease slightly, as they—

(305) The Court: I understand that.

* * *

(306) *Cross Examination by Mr. Warner:*

* * *

(308) Q. Would it be fair to say, Captain Smith, that your company receives a substantial amount of hull and cargo surveying business from MOAC? A. I believe last year that approximately 75 per cent (309) of the work we did was for MOAC and 25 per cent was for outside companies, in this New York office. This

Robert H. Smith, for Plaintiff, Cross

is '75. I don't recall what it was in '72. I would guess it was substantially the same then.

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(311) Q. In any event, your survey of July 11, dated July 11, 1972, although the survey took place earlier, was prepared, was it not, for MOAC? A. The survey was made at the request of Mr. Armitage, and the report was to be sent to MOAC, who were the insurers.

If I recall, Mr. Armitage, or the people he (312) represented then, paid the survey fee. There are copies of invoices which were put in with those papers you requested on discovery, which show it. But very frequently a broker and an underwriter will get together and will agree on a procedure to be carried out.

Q. On the report that is prepared, do you indicate who it was who requested the report? A. As a rule we do, yes.

Q. And the person who requested the report is the person for whom the report was prepared, is that right? A. Normally, yes. I think—again, it would seem to me our request came from Mr. Armitage, but the request was to turn the report over to the insurance company underwriter. That is just my recollection now.

Q. Captain Smith, I direct your attention on Exhibit G, Defendant's Exhibit G, to the second page, the left-hand portion, where it states, "Requested by Mr. Morse, Hull Underwriting." A. That is correct. That says it. As I say, it was a request that the report be turned over to him, as I recall it.

• • •

(315) By Mr. Warner:

Q. Captain Smith, what was the purpose of the survey that is reported in your report dated July 11, 1972? A. It was to say if the barge was adequate for the particular service, basically. Secondarily, to some extent, to put a dollar value on the barge.

Robert H. Smith, for Plaintiff, Cross

Q. Would it be fair to say, then, that you checked the barge over carefully? A. As carefully as I could under the circumstances. There was a prior crane on it. There were mats. Some of the compartments were covered. The barge was afloat. We opened it up. We aired it out. I went through every single (316) compartment that was open. I looked at the barge from the outside, as we always do. We checked it to see if there was any list or anything else, indents, holes in the deck. The routine things that a surveyor does.

I saw enough on that barge that gave my judgment that it was adequate for that service. And made a few comments as I recall about—a little bit of the sweat water that was in it.

Q. And it was indicated that would be removed, is that right? A. Yes.

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(321) Q. When you were out there, were you aware of Mr. Green's having any salvage experience? A. Mr. Green had said that he had rolled a couple of barges back over when he was, I believe, in some African—up some African river and none was available. His primary interest, of course, was getting this platform constructed.

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(326) Q. At the conclusion of your inspection, your (327) inspection, your report of July 11, '72, on July 11th, and as a result of it, did you conclude that the barge was fit for service? A. It could be fit for service, yes. I believe I stated that, adequate for that service. And certainly, with the normal precautions that should be taken—

Q. Yes, but you conclude that— A. That barge could work in that area.

Q. Okay. As you saw it? A. As I saw it.

Robert H. Smith, for Plaintiff, Cross

Q. And did you communicate this to either Hersent or Hersent's agent, Mr. Armitage? A. I would believe that Mr. Armitage may have gotten a copy of that, or that the underwriter called him and said that the barge was acceptable. I can't say specifically now whether he received a copy of my report or whether the contents of it was transmitted to him by the underwriter.

Q. So you mean that it is possible that you sent your report only to the underwriter? A. It is possible, I don't know. And he might have wanted to forward it.

• • •

(330) Q. Captain, you were referring before to the mooring of the barge. It is a fact, isn't it, that by mooring the barge with the lines across, when it is in the (331) upright position, the barge has more maneuverability for working on the project, and in fact, that is the purpose of mooring the stern lines in a crosswise manner? A. This is in the capsized position. The work they were doing was up here. If we put this barge upright, these lines would not be crossed and these lines would be crossed. I would tend to feel that you should not cross your lines. I don't see where it would give it any more maneuverability—

Q. Have you ever worked— A. —with the stern lines crossed—you would get a horrible chafing here which, certainly to leave a barge out on even a very minor sea condition, there would be a working here which would not be tolerated.

Q. You are referring to the—what we will call the bow when you say "here"? A. Yes. There would be a working. This was the crane end, this bow.

Q. I am asking you a different question, Captain Smith. Let me ask you instead, have you ever worked on a construction barge? A. Have I worked on one?

Q. That's right. A. I have been on construction barges when they (332) were working.

Robert H. Smith, for Plaintiff, Cross

Q. But have you ever worked—been in charge of a construction barge through its day-to-day operations? A. No.

* * *

(336) The Court: I will sustain the objection, but I will allow you to ask him if he was advised in terms of approving the barge for purpose use of the size of the crane which they anticipated mounting on it, and if so, what size he was told it would be.

Q. Could you answer that question? A. Yes, I can answer that question. Gerosa owned 200 ton capacity Manitowoc 4100 W crane, with a 160 foot boom is to be loaded aboard and secured.

Mr. Coates: That is all.

The Court: Would you have not approved the purpose if the boom had been 170 feet and everything else the same?

(337) The Witness: Probably we would have looked more into the cradling because that is an extra ten feet sticking out over the head of the barge and it would have given a little—a sharper angle in securing the boom to the sides.

The Court: But you can't say for certain whether or not that would have affected the purpose, approval of purpose?

The Witness: I feel that with the proper securing the extra ten feet of boom would have been approved.

Q. This survey was just approval of the barge and not the crane mounting per se, is that correct? A. Yes. We were to make a second survey when the crane was aboard and see that it was properly secured and cradled and so forth.

* * *

Robert H. Smith, for Plaintiff, Cross

- (349) Mr. Coates: Just to highlight some of the things in the log, the log of the tug Paumanok. On August 24, 1972 an indication that it had towed the rig 136 to the dock at Mattituck and then brought back—

Mr. Warner: I missed the date.

- (350) Mr. Coates: August 24. That it had towed the rig 136 to the dock at Mattituck and brought it back out that day.

Then on September 1st an indication that Barge 136 was towed to Mattituck and at that time there is an indication that there were high winds and a sea running one to two feet.

- (351) Mr. Coates: Earlier in the trial there was testimony as to Mr. Robert Green's functions and duties as project manager. I see that on November 1, 1972 a 0910 entry, had a call from Bob Green to turn back to Hunts Point.

So this we would say indicates that this would include telling the tug where to go and what to do.

The Court: He so testified in his deposition. He testified that he gave directions to the tug master.

Mr. Coates: Then on November 20, 1972, 0955 entry indicating that the barge 136 had been brought into the dock.

On November 21—

Mr. Warner: Excuse me, your Honor, November 20 was at what time?

Mr. Coates: My note here says 0955.

The Court: No entry at that time. Yes, it is at the right-hand side. Under the entry for 810 it says that the tug has the barge in tow bound for Mattituck Harbor. Then it says "Arrive at dock on 955."

Mr. Coates: The following day "Weather no good. All equipment still secured to Mattituck."

Then on November 22nd the barge was brought

Robert H. Smith, for Plaintiff, Cross

back out to the site and at 12:30 there is an entry on (352) November 22nd saying "Standing by on mike buoy." Then at 1525 there is an entry indicating that the Hughes barge was taken from the job site back into Mattituck.

The Court: Can we agree that the Hughes barge is another reference to the same barge, namely, 136?

Mr. Warner: Yes, your Honor.

The Court: It is sometimes called the Hughes barge, for reason not made known.

Mr. Coates: On November 29, 640, "Lay off job site with Hughes barge." Then it was towed back into Mattituck at 1030.

The following day there is an entry indicating "Northeast storm warnings."

All equipment was to stay secure at the dock awaiting favorable weather.

On December 4 there was a 1430 entry indicating that the barge had been towed back out to the job site and that the tug Paumanok was standing by on mike buoy.

The reason I highlight that is that language "stand by." On December 13, 1972 there is another entry "Stand by on mooring with 82". That is a different barge.

We have already been through the December 15th entry concerning the P.M. notation. It does indicate also that the tug again was taking orders from Mr. Green (353) and you go over to Saturday, on the 16th, they were ordered to stand by but then at 1500 "No further orders for today." I would say that those orders would have come from Mr. Green.

The Court: You ought to give the whole 1500 entry. It says "Rig riding good. No further orders for today."

Harold Brush, for Plaintiff, Direct

Mr. Coates: That is correct, your Honor.

The Court: Is the point you are attempting to make that on several earlier occasions, apparently because of heavy weather, the barge had been brought into Mattituck Harbor, that the tug was available to do so at this time under orders from Mr. Green and it didn't receive any orders to do it?

Mr. Coates: That is right, your Honor. Then standing by—it did show that at times it was standing by on a buoy mike out at the construction site.

The Court: I would assume it would stand by at that buoy even in calm waters if it was going to do any maneuvering of the barge or take any supplies back or forth.

It is wrong to imply that any time it is standing by solely because of possible heavy weather.

Mr. Coates: No. I am really directing my (354) thought here to the feasibility of standing by out there, that there was a buoy mike to which it could have tied up to.

* * *

HAROLD BRUSH, being first duly sworn by the Clerk, was examined and testified as follows:

Direct Examination by Mr. Coates:

Q. Mr. Brush, who is your present employer? A. I am employed by Hull & Cargo Surveyors, Inc.

Q. What is your job capacity with Hull & Cargo Surveyors? A. I am known as a marine surveyor.

Q. For how many years have you been—have you worked as a marine surveyor? A. I worked for Hull & Cargo and their previous companies for nine years.

Harold Brush, for Plaintiff, Direct

Q. Before that had you also been a marine surveyor?

A. No, I was in the marine field, but not as a surveyor.

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(357) By Mr. Coates:

Q. Mr. Brush, do you recall what the length of the boom on the crane was on July 31, 1972, the day of the loading?

A. I recall it when I see it on my report. I read 160 feet. I wouldn't have probably known at this late date unless I refreshed my memory.

Q. Did you on August 3, 1972, return to the Koch yard?

A. Yes, I did.

Q. Did you at that time look at the boom cradle that was used to support the boom? A. Yes.

Q. Could you describe that to the Court? A. I have to refer to my report, sir. The boom was supported just aft of the bow and the boom rest constructed of four twelve-inch "I" beam, uprights were welded across (358) bracing. Boom rested directly on two six inch by six inch wood pads.

The Court: Does your report indicate the size of the side to the cradle? Do you understand what I mean?

The Witness: I do, sir. "Boom was secured by welding upright to the upper end of the boom rest to prevent side to side motion of the boom and then was secured with three-quarter inch wire cable over the boom to prevent bouncing.

The Court: Didn't the cradle have sides coming up which in effect surrounded a portion of the boom as it sat in it? In other words, it didn't come down on a flat level—

The Witness: No. As I said, boom was secured by welding uprights to the upper end of the boom rest.

The Court: You don't have the height of those, do you?

The Witness: No.

Harold Brush, for Plaintiff, Direct

The Court: There is some difference in the testimony of witnesses as to whether the sides were six inches or a foot, or a foot and a half, which of course has some importance in terms of how restrictive they would be upon the boom coming loose in the event that the barge was on an angle.

* * *

(359) Q. I show you Plaintiff's Exhibit 8. What was the day of your first involvement following the capsizing? A. December 26, 1972.

Q. Did you that day go out to the area of the Northville facility? A. I did.

Q. What was going on out there at that time in connection with the barge and the equipment? A. An attempt was being made to trip the capsized barge, or it was scheduled to be made.

Q. Do you recall who you talked to out there? (360) You can refer to Page 2 of your report to refresh your recollection. A. Mr. Bob Green, Captain McKay and Mr. Chickvary.

Q. Did you have a conversation with Mr. Green having to do with the appearance of the barge when it was originally seen following the capsizing? A. Yes.

Q. What did he say to you what did you say to him, in substance, concerning that? A. He was—I asked him the present condition of the barge and he was—he implied that air had been blown into the compartments so that the vessel was almost heavily in the water, about four foot above the water surface.

Q. Did you have any conversation with him pertaining to hatches on the barge? Again I refer— A. Yes. All hatches, he said, except two were closed at this time. One hatch was apparently missing and one could not be closed.

Q. Referring you to the bottom—

Harold Brush, for Plaintiff, Direct

The Court: What do you mean by missing? How can a hatch be missing?

The Witness: There are different type hatches. There are hatches that are hinged and hatches that are (361) completely removable that have four or six dogdowns on it.

The Court: I would call that a hatch cover.

The Witness: It could be called a hatch cover, sir.

* * *

(370) Q. Did there come a time when you and a Captain Warm, went out to the Mattituck area in connection with the capsizing? A. That is correct.

Q. Who is Captain Warm? A. Captain Warm is my immediate superior.

Q. Did you have a meeting out there with Mr. Green? A. We did.

Q. Did you talk to Mr. Green in connection with the hatches, hatch covers, rather? A. That is correct.

Q. What was the substance of the conversation had with him concerning the hatch covers? A. Mr. Green said that they were in the process of replacing or repairing the missing hatch covers.

Q. Did he say how many hatch covers were missing? A. No, not at that time; no.

Q. Do you recall any time which he stated the number, subsequent to this date? A. I don't recall. I recall learning it from other people, but I don't recall from Mr. Green.

Q. You were back out there on January 4, 1973, is that correct? A. That's correct.

Harold Brush, for Plaintiff, Direct

(371) Q. And you again met with Mr. Green? A. Yes.

Q. Among others? A. That's right.

Q. Going over to page 3. Did you talk to Mr. Green concerning the mooring arrangement of the barge prior to the capsize? A. That is correct.

Q. What did he describe to you in connection with that? A. He informed me that the barge was secured on all four corners with one and one-eighth inch wire running to four individual moorings used for securing the tankers when unloading. The moorings are estimated at 50 ton.

Q. What about the heading of the barge at the time it was moored, prior to the capsize? A. The barge was moored in a north and south position with shoreside lines running southwest and southeast.

Q. What about the Connecticut end of the barge, the north end? A. In what respect, sir?

Q. How did the lines run out, the mooring lines? A. Well, at this time the sea side end of the barge had lines running from the northwest corner bitt to (372) the northeast and the northeast corner bitt to the northwest, which meant that the lines were crossed.

Q. Did Mr. Green talk to you about any weather warnings or forecasts that were in existence on December 15, 1972, and to refresh you, that was a Friday? A. He said that only small craft warnings were forecast when work ceased on 12/15/72.

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(377) The Court: Incidentally, I was going to ask Captain Smith yesterday when he was making his magnetic to true adjustments to make certain that he was going in the correct direction, because that,

Harold Brush, for Plaintiff, Direct

as you know, is one of the most common errors made in transferring from magnetic to true, and if you add rather than subtract you come out pretty close to north-south, but considering that he was a master mariner and I was never any more than a lieutenant in the Coast Guard, I decided against making that suggestion to him.

But somebody ought to suggest to him informally that he may have made an error, because everybody else's observations are that the vessel was pretty near north-south and he has got it—well, roughly, northwest to southeast.

Mr. Coates: The same thought occurred to me, your Honor.

* * *

(381) The Court: Although I don't know why you are wasting so much time on this when the best source of the information, Mr. Green, has already testified on the subject, and I would assume he having made those statements, there is no need for you to buttress it by having him—having this witness testify that Mr. Green told him the same thing, namely, that it was not additionally secured, other than the fact it was resting in the cradle. Let's face that right now.

Is there going to be any attempt to prove that despite Mr. Green's statement to the contrary the boom was in fact lashed down?

Harold Brush, for Plaintiff, Direct

Mr. Warner: Definitely not lashed down, your Honor. But it is our contention that if the warranty is a warranty, and if it is—if that is in effect, both of which of course we deny, then the word “secure” in that portion of the policy does not limit itself to a direct tying down, that you can secure the boom in the boom rest by placing it in there, considering its weight and the size and everything else, and by locking the house lock and by locking the swing brake.

The Court: All right. That being the position of the parties, there is no need to stress the fact that although in the early stages they had additionally secured (382) the boom by a lashing through the main fall of the boom, which approach was apparently abandoned when they extended the boom an additional 10 feet, albeit it is still not clear to me why the extension made this unfeasible thereafter, that in fact the boom was not additionally held in place by the use of lines or cables or anything else.

Mr. Warner: If I may clarify one thing in my own mind, your Honor, for the record, your Honor, your Honor used the word “lashing.” That word is used in Provision A of the policy, and I understood that that made some reference to a particular type of tying down that involved a binding and a securing directly at the point of the cradle in a lashing manner.

Since the boom was never at any time lashed before the extension, it was held by a main fall, so-called,

Harold Brush, for Plaintiff, Direct

onto the whip line, and it came down. But the word "lashing" as it is used in the policy was not something that had previously come into effect.

Mr. Coates: Aren't we now arguing semantics, your Honor?

The Court: I take it most of this case involves the semantics of the terms used in this policy. Had the policy been more specific in several regards, a lot of the issues in this case wouldn't arise.

- (383) I think the word "secure" has several connotations in the nautical sense. For example, you call out to the crew and say "Let's secure for the day," and all it really means is "We are done." It also has other connotations and other usages, and—one of the problems embodying nautical terms into insurance policies is that you run the risk that it is a multi-use word, and also that your insured is going to say "I am not a seaman. I read this in layman's terms."

* * *

- (394) Q. I show you Plaintiff's Exhibit No. 11, which is your report dated February 6, 1973. Did there come a time (395) when you went back out to the site again?

A. That is correct.

Q. Were you looking for the boom crotch that day?

A. Yes.

Q. Did you have any conversation with anyone as to where it might be? A. I talked to Mr. Joe Chievary.

Q. What did he tell you concerning the location of the boom crotch? A. He said he thought it was aboard the barge No. 82, which was working on the job site.

Q. Did you go there? I refer you to the last page, to refresh your recollection. A. That was the later date.

Q. Did you eventually go there? A. Yes, sir, I eventually went aboard Barge No. 82.

Harold Brush, for Plaintiff, Direct

Q. What was the date? A. The 1st of February, 1973.

Q. Did you find the boom crotch? A. No, I didn't.

The Court: Are the words "crotch" and "cradle" synonymous?

The Witness: Crotch, in my opinion, sir, is an (396) elevated cradle, where a cradle is lower. That would be my own opinion.

. . .

(409) By Mr. Warner:

Q. Mr. Brush, if I may, I would like to direct your attention to your report dated August 21, 1972. A. Yes.

Q. I believe that is marked as Exhibit H. This was when you came in and examined the barge and observed the crane being loaded, and then you came back and observed the lashing, is that right? A. Correct.

Q. I am correct in saying, am I not, that the procedure went smoothly and the crane was secured to the barge satisfactorily? A. Well, we did have some problems. There was a delay and things because of some difficulties encountered at that time.

Q. But you did view the operation as being very smooth? (410) A. Yes. As far as putting the barge—the crane on the barge.

Q. And as far as securing the crane to the barge, the crane was, in your opinion, secured satisfactorily and safely, is that right? A. That's correct.

Q. And you communicated this information to the agent for Hersent, then DeLong, a Mr. Armitage, the insurance broker? A. Yes.

Q. And you also gave a copy of your report to the underwriters, MOAC? A. I would have to assume this. I don't know.

. . .

Harold Brush, for Plaintiff, Direct

Q. In any event, you assume that you did it because that is your normal practice? A. I would assume so, yes.

. . .

(417) By Mr. Warner:

Q. Do you know a Mr. McLaughlin, Mr. Brush? A. From our office?

(418) Q. Yes. A. Yes, I do.

Q. His name is Joseph M. McLaughlin? A. That is correct.

Q. Did you get to examine any reports that he had prepared prior to going out to the barge; did you get to talk to him prior to getting out to the barge? A. No, sir.

Q. Are you aware at this time of the contents of a particular report that he wrote, dated June 29, 1972? A. No.

Q. Do you know, Mr. Brush, whether your company knew if the boom on the crane may be extended during the course of the work—do you know one way or the other whether your company, at the time you went to see the crane, had any information in that regard? A. I know of no information in that respect, no.

Q. Are you familiar with all the information, though, available in your company? A. Well, we don't always maintain communications between each other because we are at different ends, moving around.

(419) Q. So to your knowledge the company didn't have the information—that is, your company didn't but you cannot say for sure, is that correct? A. That's correct.

Q. Let me show you some pieces of paper, Mr. Brush, which are marked Q for identification. Please don't read from that, but look at the front page information, please, turn to the last page. There is a signature on there. A. Yes.

Harold Brush, for Plaintiff, Direct

Q. You recognize that signature? A. Joseph McLaughlin.

Q. I don't want you to read from it, I am asking you—
A. I don't know his signature per se, no.

Q. Do you recognize this as a record of your company, Hull & Cargo Surveyors, Inc., that is of the type that is kept in the ordinary course of business? A. Yes.

Q. You do recognize it as that? A. Well, as best I can—the copy itself doesn't have all the information on it.

Q. Now, I direct your attention to the third page of these papers, particularly the particular paragraph (420) that I am pointing to. Please read it to yourself. Don't read it out loud.

Mr. Hanan: Could counsel tell us the date of that report?

Mr. Warner: The date is June 29, 1972.

Q. You read that one paragraph? A. Yes.

Q. That is Exhibit R and not Exhibit Q that we have been referring to.

Now, Mr. Brush, based on your experience in the company and you are familiar with the business of your company, and, I assume, the procedures of your company—correct? A. Yes.

Q. And the personnel of your company, can you state to the Court whether you are able to form an opinion at this time as to whether, prior to August 21, 1972, your company had information that the boom on this crane that you examined may be extended to 170 feet? A. From what you just showed me, it would appear, yes.

• • •

(426) Q. I gather then you had a favorable impression of Mr. Green's abilities? A. My—you want an opinion now?

Q. You gave an opinion before, didn't you, he was an intelligent man? A. My opinion is that Mr. Green was an excellent engineer.

• • •

Joseph Miller, for Plaintiff, Direct

(441) JOSEPH MILLER, having been previously sworn, was recalled and testified further as follows:

The Clerk: Sir, I remind you you are still under oath.
The Witness: Yes.

Direct Examination (continued) by Mr. Coates:

Q. Mr. Miller, have you had occasion to look at the tug Paumanok's log that has been made an exhibit in this litigation? A. Yes.

Q. And you recall there was an entry at 12/16, which is Saturday, at 1500 hours, the entry was "Rig riding good. No further orders for the day. Crew to return Monday at 0700," is that correct? A. Yes.

Q. Who was on duty, being an employee or employees of Hersent, between the time mentioned here and Monday, at the shoreside or at the site? A. The whole crew, which is the working crew, and the tugboat.

(442) There was no one out there on that date.

Q. No one at Mattituck or out there, is that right? A. Right.

Q. Did Hersent have any other tugs that were available in this area over the weekend? A. Possibly the Way-zoff, which belonged to Northville.

Q. That is a Northville work boat? A. Yes.

Q. That didn't have the horsepower that the Paumanok had, is that right? A. No, it didn't.

• • •

(443) Q. Mr. Miller, you know Bob Green who was in charge of the site? A. Yes, I do.

Q. Do you happen to know his qualifications for employment in the capacity that he was working on the barge? A. Yes. He was project manager on jobs before Northville, over and around the Middle East area.

Q. How about the particular kind of work that he was doing on this barge, which meant that he was on the barge and supervising the men and supervising the construction? A. Yes, same sort of situation.

Joseph Miller, for Plaintiff, Direct

Q. He had done this thing before? A. Yes.

Q. For how long a period, if you know? A. Oh, well, as far as I know, he was with Hersent—DeLong for about 20 years in this capacity.

Mr. Warner: Thank you. No further questions.

By the Court:

Q. What do you know about Mr. Green's qualifications as a seaman? A. None, your Honor.

Q. You don't know anything about it? A. No, not as far as that goes.

• • •

(444) Mr. Coates: Gentlemen, I am going to read from interrogatories, if you want to follow this.

Your Honor, these are interrogatories propounded in September 28, 1973, by the plaintiff, that being Continental, to Hersent.

Number 3 says, "State with respect to the allegations contained in paragraph 12 of defendant's answer each and every piece of miscellaneous equipment located on the Hugues 136 on December 1, 1972."

There is a listing, including: A Cameo Compax II radio. A change house. A hand-held radio.

Number 6: "With respect to the warranty set forth on page 2 immediately following Condition C of the storm and heavy weather plan, state the name and address of the person designated by defendant herein who is responsible for making judgment as to the severity of conditions and to see that proper procedures were followed."

Reading the answer in part. "The person designated by defendant to be responsible for making judgment as to the severity of conditions and to

Joseph Miller, for Plaintiff, Direct

see that the proper procedures were followed was Robert J. Green, 15 Paula Drive, Farmingdale, New York."

- (445) Number 8: "Set forth the name and address of each and every employee of the defendant who was employed by it and in any way in connection with the activities it was conducting with respect to the building of the Northville dock facilities at Mattituck, Long Island on the following dates: December 14, December 15, December 16, December 17, December 18, December 19, and with respect to the person identified, set forth (1) the job title or capacity in which each was employed, describing in detail his specific duties and/or work; (2) set forth with respect to each the exact hours of the day work; (3), set forth with respect to each the precise location at which each person performed his duties and/or work; (4), set forth the total number of hours for which each person was paid on each said day."

Robert Green is listed and there is an asterisks under each of those days, meaning he was present.

Joseph Miller, who was just on the stand, was listed as an accountant.

Robert Green is defined as project manager. Hans Wendel, as president of Hersent Offshore, Inc.

24: "Describe the dimensions of the 4100 Manitowoc, the length of its boom at the time of its arrival at Mattituck, and the length of any additions made (446) to the boom after it arrived at Mattituck."

Answer in part: "The length of the boom upon arrival at Mattituck was 160 feet. A 10-foot section was later added."

• • •

Henry Martin Tiedemann, for Plainiiff, Direct

(459) HENRY MARTIN TIEDEMANN, being first duly sworn by the Clerk, was examined and testified as follows:

Direct Examination by Mr. Coates:

Q. Mr. Tiedemann, when did the office of Macklin, Hanan & McKernan first consult with you with respect to this litigation? A. I think it was about October 6th of this year.

* * *

(464) By Mr. Coates:

Q. Did you also review the Faulkner's Island marine coastal weather log for the period in question, being on the log from December 14th through the 18th? A. Yes, I did.

Q. Did you form an opinion with respect to hatch covers, the boom on the crane, the manner in which it was secured, and the manner in which the barge and the crane, the equipment out there, was secured over the weekend, as to what caused the barge to lose its (465) stability and go over? A. Yes.

Q. Let's go into the hatches first. How is that relevant to your conclusion? A. The hatches being either loose or open would allow sea water to enter into the compartments, which would weight the barge down and if it is an uneven distribution of weight, cause it to list to the one side or the other, depending upon which compartment was flooded.

* * *

(469) By Mr. Coates:

Q. The platform is that way? A. Okay.

Mr. Warner: The counterweights are out towards sea.

Mr. Hanan: Towards the platform.

A. Well, with the barge on a four point moor this way, it can't move. It is rather rigidly fixed on position. Of course, this is so, so they can do their pile driving.

Henry Martin Tiedemann, for Plaintiff, Direct

The sea coming from any other direction than from bow on would have a tendency to push the barge sideways, taking seas over the side, which is the—the barge can (470) roll port and starboard, and has an easier tendency to take seas over the side, although it would also take seas over the bow, also.

The seas built up to a pretty high condition, in my opinion.

The boom, with such a long overhang, from the photographs I had seen—this, of course, is a presumption on my part because I wasn't there to see it, but I would think that that boom sticking so far out resting on the cradle would be whipping up and down once that comes out—

Q. You have seen a photograph of the cradle, is that correct? A. Yes, right. Once that gets out of the cradle, it would have a tendency to swing even more port and starboard.

Q. I want you to assume that the boom was not secured into the cradle, other than having just been lain down—
A. I heard that this morning.

You heard Mr. Brush's testimony, and I want you to assume the facts that came forth through him also in giving your answer. A. All right. With the boom free and the barge, say either broadside to the north deep seas, or northeast (471) seas, or to the northwest seas, which built up later, and any hatch covers that are loose or open, you are going to have green water on that barge, and you are going to take water.

The more water you take on the barge in one compartment or the other, if it all happens to be on the port side—I believe there was a total of four covers either loose or open on the port side, that would have a tendency to push the barge over, or list the barge over towards the port side.

The more she goes over that way, and if then it become a northwesterly, and that is down in the water, and that is the down side, even greater chance of taking more water exists.

Henry Martin Tiedemann, for Plaintiff, Direct

It is like falling downstairs, it gets worse and worse.

• • •

(472) The Witness: I have had occasion to moor. I sail that area all the time. We would never moor on four points in an area out there. The only time we ever moor four points is when you are absolutely in a restricted area and you can't allow the boat to go anywhere.

The Court: What kind of boats are you talking about mooring?

The Witness: The boats we used on the surveys for the Dixon Chemical barge and the small boats we used on the survey of the wreck out here off Long Island, a tanker that struck a submerged destroyer out there, which we had (473) to do diving on.

The Court: I think that while the witness' qualifications are not that of a professor at the Kings Point Maritime Academy, that he has sufficient expertise to express an opinion on it.

• • •

Q. I asked you whether there was a feasible and more prudent way to have moored the vessel than the manner in which it had been moored over the weekend in question? A. Well, yes. I would have put one end to the seas, so she could swing with the wind. Two, I would have made certain that that boom was secured, because with that long overhang and the barge pitching and rolling, I can't see how that boom would stay in the crotch, even with the 10-inch high coaming on the side of it.

(474) The Court: Suppose it had an 18-inch coaming on both sides?

The Witness: If you are getting a six seven or eight foot sea running out there, that boom is sticking way out beyond the end of the barge and that will be whipping up and down.

Henry Martin Tiedemann, for Plaintiff, Direct

I think it is matter of actual calculation.

* * *

By Mr. Coates:

Q. Assume for a moment that the boom was guyed, was bridled in such a way that its motion would have been limited in the boom crotch, would such a guying and a bridling have taken a strain off the boom crotch itself in this type of weather? A. If the lashing is to the top of the boom crotch, no. But if the lashing were to the— from the boom down to the sides, and the boom to the crotch, the two of them together would have been a better way to do it.

* * *

(476) By the Court:

Q. With respect to the boom coming out of the cradle, there has been some testimony that the boom had a locking mechanism. Are you familiar with the types of locking mechanisms used on cranes of this sort?

The Witness: I haven't studied the book on this particular crane, but I have assumed that it was an hydraulic driven pin going home into a female socket, and that there would be some play in that, a little bit of play. But even a quarter inch play at the end of a 180-foot boom is going to be somewhere between eight and ten inches of whip at the end of that boom, without any—

Q. As I understand the locking mechanism, even if the boom came loose of the cradle, the locking mechanism was designed to prevent the boom from swinging. It might, as you point out, with a little bit of play move a foot or so, but if the locking mechanism holds it should prevent (477) any substantial boom swing? A. I have taken the assumption that these cranes when designed are designed primarily for land use and these locking mechanisms are put in for normal wind loads like they are on the land,

Henry Martin Tiedemann, for Plaintiff, Direct

they leave the boom up, so the boom doesn't swing around like a pinwheel. At sea when you get a rolling and pitching and heavy dynamic loads on this thing, if she did jump out of the cradle, and if the locking pin did hold, I would think there would be enough inertia there to move that crane around and get the whole thing moving dynamically and that would be what would worry me.

Q. As it gradually built up movement side to side it would eventually snap the pin and swing free? A. Once you get a 100-ton unit, or however much the whole crane weighed, moving, you know, the dynamic loadings on these heavy objects moving becomes disastrous insofar as the lashings and also the pin.

Q. There were no lashings here, you can forget that. A. All right. I don't know whether the pin held or not, I don't know.

Q. Is movement of the crane essential to the capsizing of the vessel? Could it not have capsized simply if (478) it took on adequate water on one side, considering the waves at that time? A. This shows three watertight bulkheads, longitudinal bulkheads on the drawing. If we were taking water in, say, on the port side, in four of those compartments, and we took some water in the other compartments, which are closer to the center line, I believe you would lose the barge to capsizing, yes.

Q. How many watertight compartments—how many in effect, faulty hatches would you have to take on that much water? A. Well, the report—the Exhibit 12, on the back of it, shows the hatches which were open. It shows the four—on the port side now—starting from forward, which I assume is the crane end, which is labeled "bow," that covers reported as loose.

The second compartment shows cover with—I think it says wire under cover.

Mr. Warner: May I ask what you are reading from?

Henry Martin Tiedemann, for Plaintiff, Direct

The Witness: Yes. I said Exhibit 12 on the sketch on the back where the hatch covers and the damages were shown.

A. (continuing) Then there is another six-inch square hole right here, and then this shows this little (479) compartment, the cover loose. This one here it says "Closed, okay."

This one is gone.

So actually the only tight compartment we have is this one here. This compartment here had water in it due to fresh water ballast, and of course I don't know what happened to this compartment because there is a dot shown which may have been a cover, but it doesn't say whether it was there or not, so I don't know.

I think if you get half the barge with a good amount of water in it, you are going to tip her.

Q. Could the barge have capsized without taking water of any appreciable amount if the only thing which occurred untoward was the boom coming loose from the cradle and starting to freely swing? A. With just the boom hanging over the side?

Q. Just the boom. A. I think that is much less likely, though there might be some influence on the way she was moored and how the waves hit her, but that is much less likely that way.

Q. Do you know which direction she capsized in? A. I believe, and I would have to make sure of this, but I believe she went to the port side, so that the crane went over to the port side.

(480) Mr. Coates: By "port" you mean to the west?

The Witness: Yes.

By the Court:

Q. The port would be the west side.

Mr. Warner: Yes.

* * *

Henry Martin Tiedemann, for Plaintiff, Cross

(481) The Court: It indicates that the crane went off the port side, and the crane would naturally slide toward the side on which it was capsizing. That taken into account, considering the winds were from the northwest, you would almost have to conclude that it was water in the holds and not merely a free swinging crane, correct? Because the free swinging crane would have been blown towards the starboard side, since the winds were from the northwest.

* * *

(482) *Cross Examination by Mr. Warner:*

Q. Mr. Tiedemann, just to clarify it in my mind before I begin asking you a couple of questions, would you repeat for me all of the factors which, in your opinion, have contributed to this capsize? I think you listed them. You don't have to go into detail about them. A. The three major ones?

Q. Yes. A. The possibility of the boom getting out of its cradle or crotch, giving the dynamic loadings on that, possibly beginning to move the whole thing over.

The four point moor so the barge was not able to swing. The possibility of the covers being loose or open.

(483) Q. Anything else? A. Those are the major points.

Q. Mr. Tiedemann, there is no doubt in your mind, is there, that even if the boom got out and the barge were moored as depicted, and all of the covers that were indicated on that report were loose or open, still if the sea was not rough the barge would not have capsized, is that correct? A. If the sea was not rough, I doubt if the boom would have come out of the cradle.

The Court: Suppose they just accidentally left it out through pure negligence, and suppose they accidentally left some hatch covers off and moored it the way they did, but the seas were moderate, would she have capsized?

Henry Martin Tiedemann, for Plaintiff, Cross

The Witness: Well, I don't think so, because I did see some pictures of the barge in a fairly rough sea, and she obviously worked out there for some time before she did suffer this fate.

The Court: That is not the question. On those occasions, so far as we know, the boom was always in its cradle and there were never any hatch covers open.

Assume for the moment, though, that hatch covers were left open and the boom was not cradled, but you had moderate seas. Would it have survived?

(484) The Witness: I believe so. In other words, no green water on deck?

The Court: Yes. She had what, about three, four foot freeboard?

The Witness: The winter load line I think is two foot five something.

The Court: So unless you get waves over three feet you are not going to take anything on top.

* * *

(485) Q. In your experience, Mr. Tiedemann, what is the common form of lashing, if a boom of this type is to be lashed? A. If you had a drawing of the boom crotch, it should be shown on there if it was intended to lash it, it should be shown on there some lashing pads, which would give the size of the lashings.

Q. What are lashing pads normally made of? (486) A. Steel.

Q. Steel? A. That's right.

Q. And then what do you do, you wrap the steel around? A. It depends on how you want to lash it, you can do it with a straight mechanical turnbuckle or you can do it with a wire rope and a turnbuckle, or you can use chain as they do with lashing cargo on ships, or you can use a peck & hale type of lashing.

* * *

Henry Martin Tiedemann, for Plaintiff, Cross

(488) Q. It is possible for the boom to swing and not lose the barge? A. Yes. I wouldn't want to be near it.

Q. I am sorry? A. I wouldn't want to be near it when that happens.

Q. That's true, you wouldn't want to be near it because it would be swinging around, but it certainly is possible for the boom to be swinging around and for (489) the barge still to remain upright? A. Yes.

Q. In fact, the cranes that were made for the World Trade Center have in their specifications that in a strong wind you are supposed to leave them swing around, is that correct? A. I don't know anything about the World Trade Center. That is a dry structure.

Q. It doesn't surprise you that certain— A. Sure, let them feather into the wind.

Q. Okay. Now, you mentioned that one possibility was that the boom came loose and was whipping up and down. What would generate the vertical force—

The Court: I don't think he said that. I think it was whipping up and down and then it came loose. As I understood it, the whipping up and down is what tended it to get out of the cradle.

Mr. Warner: The boom was whipping up and down and then came out of the cradle.

Q. What would generate the force that would cause the boom to whip up and down, that would generate the vertical force? A. Pitching of the barge.

* * *

(490) Q. Mr. Tiedemann, did you calculate the magnitude of pitching? A. No, sir.

Q. —that would be required to generate a force to lift the boom? A. No, sir.

Henry Martin Tiedemann, for Plaintiff, Cross

Q. So that it is a hypothesis without precise mathematical substantiation? A. That is correct.

Q. Do you know the weight of this boom? (491) A. Not exactly, no.

Q. Did you hypothesize any weight for the boom when you were thinking about this? A. No. I told you my observation was made from the picture I had seen of the barge with the boom extension.

Q. Did you have in your mind any weight that the boom might have had when you were trying to decide whether this could have happened or not, and what its likelihood was? A. We are familiar with booms and their manufacture. In fact, I used to do all the rigging analysis for Bethlehem Steel Company when I worked for them, so I have some idea of the weight of the boom.

Q. What did you assume it was? A. I didn't run that calculation through my mind, but if you want a guess on how much that boom weighs—

Q. Just a moment, Mr. Tiedemann. You didn't use in your calculations or in coming to your conclusion any particular— A. Until this moment I have not put a weight on the boom. I haven't as yet.

(492) Q. Did you make any mathematical calculations at all in arriving at the conclusions that you have given us? A. No, sir.

Q. None at all? A. No, sir.

Q. You would agree, Mr. Tiedemann, that mathematical calculations can be helpful in substantiating hypotheses? A. Yes, sir.

Q. Mr. Tiedemann, if the boom did come out of the cradlings, as you hypothesize, do you have any estimate of how long it would have been out of the cradlings and swinging around? A. No.

Q. If the boom came out of the cradlings and was swinging around, would you expect damage to be done to

Henry Martin Tiedemann, for Plaintiff, Cross

the cradlings itself from the swing? A. It depends on which way it went and whether it stayed there or not.

* * *

(495) Q. I want you to assume, if you will, Mr. Tiedemann, that the barge covers that are in the diagram—I think it is marked 7-A—is that what it is? A. This is 12.

Q. Right. I'm talking about the Cushing, the C.R. Cushing drawing. A. I don't have that here.

* * *

Q. I'd like you to assume, Mr. Tiedemann, that all of the compartments which are indicated on the port side as possibly open were—or loose, were either open or loose.

If we assume that all of those compartments are filled, let's say two-thirds full—is that a reasonable amount to assume, if we want to assume bad conditions? A. We will assume two-thirds.

Q. Okay. Assuming two-thirds full, but assuming that the boom was not out, and the four-point mooring remained the same, in moderate waters would you expect that the barge would capsize? (496) A. In moderate waters?

Q. Moderate waters. A. And with no more water coming on board?

Q. I said moderate waters. A. With no more green water coming through the loose manholes?

Q. We are assuming two-thirds full— A. And we assume the deck edge is not submerged?

Q. That is moderate waters. A. So the deck edge is dry, and she probably would not go too much further. I have not run a calculation on that. That is just a straight assumption.

Q. Mr. Tiedemann, you are, of course, familiar with the concept of the righting arm, correct? A. Yes.

Q. What does the righting arm refer to? A. It is the righting force to push the barge back up again after she's heeled over.

Henry Martin Tiedemann, for Plaintiff, Cross

Q. And it is the righting force, spelled r-i-g-h-t, righting force that operates in opposition to the heeling force, is that right, and those are the two things that determine whether something is going to go over or stay up. And you are familiar with righting arm curves? A. Right.

(497) Q. Would it be correct in assuming that you did not make any calculations of righting arm curves? A. I did not make any calculation.

* * *

(498) Q. Would the force of the crane—do you know how much this crane weighs? A. I'm not positive. I think I saw somewhere about 100 tons.

Q. It weighs 182 tons. A. I stand corrected.

(499) Q. Then would the force of this crane moving off to the port side contribute significantly to the loss of stability and capsize of the vessel? A. You are talking about the whole crane, the crawlers the cab and the boom all moving to the port side?

Q. No, I want you to assume that the boom remained in the cradlings. A. Okay. The crawler and the crane moves but the boom stays in the cradlings?

Q. That's right. A. Yes, it would contribute to the capsize.

Q. And it would contribute to the capsize much more than the four-point mooring would, wouldn't it? A. I think the four-point mooring is what allowed you to take water on board, or—a heck of a lot more expediently than if she had been on a two-point moor. I think you can't really put the two together. The fact that the—you were taking water aboard is one thing. The fact that if you had the crane listing the barge even further, that just complicates matters.

Q. 182 ton crane going off to the port side would exert a substantial heeling force? A. No question about it. For the time that it is on the barge.

* * *

Henry Martin Tiedemann, for Plaintiff, Re-direct

(501) *Re-direct Examination by Mr. Coates:*

• • •

(502) Q. We had been into the area earlier concerning the mooring of the barge and the rig, and we went into the four point moor versus the two point moor. Would there have been another alternative with respect to the mooring which would have been prudent under the circumstances of the weekend involved, the weather involved?

A. Yes, I think so.

Q. What is that?

(503) Mr. Warner: I object, your Honor. We can all decide what is prudent looking back on the weather. But as for the specific weather forecast which was available to the men at the time that they were on the barge when they had to leave, which is 9:45, as set forth in the—

The Court: Again, that assumes that they couldn't come back any time from Friday afternoon or Saturday, as to which there is no evidence except from the both captains' testimony.

I will allow it.

A. The southern mooring points, as the diagram on the board shows, had 100 and a 150 foot of wire out. I understand there was a good deal of wire left on the reel, so those could have been slacked off you know, to the full thousand foot, if that was the length on the reel, allowing the barge to have a better heading into the seaway.

Q. I would like you to assume that there had been some dewatering prior to the capsizing, what would the need to pump indicate to you? A. The need to pump obviously—obviously they had observed through the manholes, they had observed water in the compartments and they had decided to get it out since it was obviously—it obviously should be removed.

Q. That water could have come from more than one (504) source, I suppose? A. It could have come from the

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open manhole or manholes or through the hull in some way.

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The Court: —is there any other factor which leads you to conclude that the barge had taken on substantial water before it capsized?

The Witness: When they—again, of course, the fact that I did read was that the barge, when she was upside down, had a list on the starboard bow, I believe, which would—which in the upright condition would have been the port bow, and I would have to check my notes, if I could—

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(507) AVRUM AARON FREELUND, 2 Gabrus Drive, Glen Cove, New York, called as a witness by the defense, having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Warner:

Q. Mr. Freelund, what is your profession? A. I am a naval architect and marine engineer.

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(509) Mr. Warner: Am I correct in assuming this is Plaintiff's 7A?

Mr. Coates: Yes.

Q. Mr. Freelund, we provided you with various materials concerning the events that are the subject matter of this litigation, is that correct? A. Yes.

Q. Can you describe in general terms what they consisted of? A. Yes. They were the Hughes Bros.' drawings of the barge, its arrangement and structure—

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Q. Those were the diagrams that Mr. Tiedemann was referring to? A. Yes, the Hughes Brothers 136-1 and -2. There was a Hersent Offshore drawing showing the stowage of material on deck of the barge.

(510) There was a tabulation prepared by Hersent giving weights and locations of this material. And there was—there were copies of the various surveyors' reports relating to the casualty and to the barge before the casualty.

Q. Were there photographs also? A. Well, there were Xerox copies of photographs. I was later given the opportunity to examine the original photographs.

Q. Based upon those materials, did you put together a reconstruction of the arrangement and positioning of equipment on the barge 136, and its relationship to the size and structure of the 136 prior to the capsizing? A. Yes, I did. I felt that it was necessary to satisfy myself as to the reasonability of the reported drafts of the barge prior to the accident in relationship to the loading that was reported for the barge.

Q. The approach that you took and the materials that you used, are these customarily employed by members of your profession to do this kind of work, that is, the reconstruction of what may have been positions and relationships? A. Yes, certainly.

Q. As a result of examining all these materials, (511) did you put together what has been marked Exhibit 7A? A. Yes.

Q. Would you please explain to his Honor how you went about directing the depiction of this diagram? A. To start with, we took the structural drawings of the barge and prepared an estimate of the barge's weight and the location of the center of gravity.

We then took the tabulated weights and positions for all the equipment on board and determined the weight and center of gravity of the barge, plus the equipment.

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And we then determined the draft fore and aft that would result in this loading. This didn't check with the initial drafts that were given for the barge on departure from New Jersey.

In further checking it appeared from the reports that the rake compartments on the end opposite the crane were filled with fresh water for ballast to apparently reduce the trim. When this fresh water was considered in there, the drafts that we obtained forward and aft for the barge agreed to within a few inches of the drafts reported by the surveyor who examined it prior to its departure from New Jersey.

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(514) By Mr. Warner:

Q. Please continue. A. All right. Then in order to satisfy myself as to what would have been a reasonable assumption as to compartments that might or might not have been opened or (515) possible damage to the hull or unsecured manholes, I attempted to reconcile the reports contained in the surveyors' reports and the diver's examination with the photographs taken after the barge was righted and with the arrangement drawings of the barge showing where the bitts and manhole openings were located. On that basis I was able to orient the photographs to the barge, the numbers on this drawing indicate numbers that I assigned to the photographs.

I don't know if they are still in that order in the folder.

I was able to locate from the diver's descriptions and from the original Hersent listing the stowage positions of the equipment, I was able to satisfy myself as to which end of the barge the crane was on, whether it was the end with the longer mid-body compartments or the shorter mid-body compartments, and to reach a reasonable assumption as to which were the manholes that the diver reported either loose or missing on his first examination immediately following the accident.

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Those are the ones that are noted with a rectangular box around them as either gone or lost or missing.

There was one noted as hanging by chain, which (516) was not quite clear from the report as to which one is meant. It is the one on the upper center side of it there. I haven't designated a manhole as to—as to which this applied to, but for the purposes of calculation, I assumed it was one of the larger mid-body compartments, because that was the least favorable assumption to make.

Q. In other words, where you had a question, you would assume the less favorable condition? A. Yes.

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(518) Q. Mr. Freelund, based upon all the materials that you read, and using this diagram to whatever extent you felt was necessary to do so, and being aware, as you were, that sea conditions were rough, let us say, in the area where the barge was moored, did you reach a conclusion as to the probable cause or causes of the capsizing of the 136? A. Yes, I did.

Q. Before I ask you those conclusions, which I will get to in a moment, in order to reach them, did you make use of mathematical computations? A. Yes, I did.

Q. Would you please tell his Honor what mathematical computations and techniques you employed? A. Well, I first assumed that the capsizing all was possibly related to the existence of free water in the hull causing a free surface effect. So I made the assumption that there was enough water in every hull compartment (519) to produce a full free surface, but I didn't assume an increase in draft due to that water which would tend to come from a significant amount of water, it was a small amount of water that was assumed, and I found that the metacentric height with that amount of free water in there was more than ample for the barge to be expected to remain upright under any reasonably foreseeable conditions.

I then assumed that there may have been flooding and

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in various compartments in the barge through possible loose or open manholes.

I then assumed that the flooding condition would have been the worst possible condition which would have water on one side of the hull. This—the flooding that was assumed was that all the rake tanks in the end where the ballast was placed were pretty full; that the outboard tanks on it, I guess it's—if we are calling that the stern it would be the portside, were full except for the one immediately adjacent to the flooded rake bulkhead and that the longer of the two inboard compartments on that side also had water in it. I beg your pardon, I didn't assume they were full, I assumed they were two-thirds full.

This was, it seemed to me, the least favorable assumption that could reasonably be made as to possible (520) flooding.

I then calculated the metacentric height in that condition and I came up with a figure of 28.3 feet, which is a considerable metacentric height for a vessel of these dimensions. The angle of heel that resulted from that based on a simplified calculation, just using the sine of the angle of heel rather than the righting on the curve was 11.8 degrees. This would have put one corner of the barge under because that would have covered the heel of about 9 degrees of that draft.

I then later, having had available the cross curves for the vessel, I prepared a righting arm curve under those conditions and that also showed that the angle of heel was almost exactly the same 11 degrees and that even if that condition at—there would have been another—she would have been able to roll to 60 degrees before totally losing stability. However, the reserve righting arm was rather small in that condition, and I—it was not enough to account for capsizing without some additional impetus, in my mind, but observing from the diver's report that there was a bitt bent on it—opposite the position of the crane, this also showed in the photographs as a bitt bent out-

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board, I attempted to reconcile this with the action of the capsizing, and I assumed that the crane (521) had, as a result of the list on the barge and the motion in the seaway, broke loose from its securing lashings and suddenly shifted outboard striking this bitt at the time and it was the sudden impetus of the shift of weight of the crane together with the motion of the barge and the seaway that caused it to capsize.

Q. You mentioned that you made a righting arm curve calculation. A. Yes.

Q. Did that require the use of a computer? A. It doesn't require it, but the use of a computer makes it considerably less onerous.

Q. What does the righting arm curve calculation contribute to this? A. It presents a picture of—for still water, a picture of the ability of the vessel to right itself when heeled to various angles to either side of center line.

The Court: What you are saying is that taking into account all of the factors possibly with respect to flooding, that flooding alone could not have capsized the vessel?

The Witness: I don't think it likely because of experience I have in those waters as to the violence (522) of the rolling that you are likely to get. I wouldn't say it is impossible, though.

The Court: The other expert said he thought it was possible, but he thought it more likely that the boom swinging loose, because of the list and the rough seas, when added to the amount of water on the flooded side, caused the capsizing.

You are taking the opposite—not opposite, but other approach and saying that the list caused by the flooding put extra pressure on the crane which caused the crane to break loose and slide to the flooded side and that when the weight of the crane reached the side in conjunction with the water already there, that was sufficient to capsize it?

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The Witness: I am not saying that the crane shifted solely because of the list. I am saying that the list made it easier for the crane to break loose from its lashings. I think it would have been the rolling of the barge that would have caused the crane to work on its lashings and break loose. We substantially agree that it was the shifting of the crane in some form or other—

The Court: The only difference between you and the other expert is, did the crane break loose or did the boom break loose?

(523) The Witness: I find a little confusion. When we talk about the boom breaking loose, we are referring to the crane cab rotating on the center pin, that the crane is rotating from side to side, not that the boom is swinging up and down.

The Court: I think what he testified was that first the boom would go up and down with the seas and on one of these up and downs, particularly with the list on the vessel so that it is against one restraining side, that ultimately it comes out of the restraining cradlings and is free, hanging free out of the cradlings. Then we got to question of how much movement it could have without the locking pin shearing, and on cross examination he was asked whether, if no damage was found to the boom, he would have thought it swing particularly, and he said it was less likely if no damage was found to it.

I don't believe anybody testified concerning the condition of the locking mechanism when the crane was finally recovered.

The Witness: May I add something?

The Court: Yes.

The Witness: There was a report done by a civil engineer as to the condition of the locking mechanism after the crane arrived back at its owner's yard.

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Avrum Aaron Freelund, for Defendant, Direct

(524) The Witness: That is the report of Henry Janes.

Mr. Warner: While this is being looked for, may I ask Mr. Coates, your Honor, to produce the Hull & Surveyors report of January 3, 1973?

The Court: Yes. Is that in evidence?

Mr. Warner: No. But I wanted to offer it. It has been marked as Plaintiff's 15. I guess I should change it to Defendant's T, Hull & Cargo Surveyors, Inc., report dated January 3, 1973, authored by W. F. Warm, of Hull & Cargo Surveyors, Inc., requested by D. Romando,—MOAC. Produced pursuant to subpoena, your Honor, and I offer it in evidence.

(525) The Court: What letter?

Mr. Warner: T.

The Court: Any objection?

Mr. Coates: No, your Honor, no objection.

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By Mr. Warner:

Q. Mr. Freelund, I want to direct your attention to the last paragraph on the first page of this report. Would you please interrupt what you are doing now just to read that out load? A. "Equipment: Divers have now reported the Manitowac 4100 crane to be lying on its side were all in good order except for glass and light metal around the cab area. The boom appears to be undamaged."

The Court: I had gotten to the point of inquiring about the locking mechanism, which is an important element of considering how much the boom could have swung had it come out of the cradlings, and the witness was telling us that his conclusions are based upon some document not in evidence which indicates that the locking (526) mechanism failed.

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I was telling you whether or not the document was put in evidence, you have to mark it for identification because your adversary is entitled to cross examine on the basis of all documents used by the expert in reaching his conclusion.

Q. Mr. Freelund, could you direct my attention to that portion of this report that you are referring to. A. Yes.

Q. The report of Henry Janes—

Mr. Warner: I think that plaintiff has a copy of that. I know we got it from them. The date of that report, Mr. Freelund is—

The Witness: January 19, 1973.

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(527) Q. Also in reaching your conclusion that it was more likely that the crane broke loose than that the boom was swinging, did you take into consideration the report of Captain Warm? A. That I just gave to you. Yes, I did. The report indicates the boom appeared to be undamaged.

Q. You indicated also that you took into account the bitts that were bent out. A. Yes.

Q. On the portside of the boom? A. Yes.

The Court: How was the crane fixed to the barge before the accident in question?

The Witness: There is a report that indicates it was secured with steel members welded to the deck through holes in the mat and with wire lashings. I don't know if this has been verified, but it is in one of the (528) surveyor's reports.

Q. Is that the early surveyor's report by Mr. Brush? A. Yes.

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(530) The Court: Based on divers' surveys how many were off before the salvaging commenced, off and how many were loose?

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Mr. Coates: The diver hasn't testified, and we don't know whether he looked at every single manhole.

The Court: I am aware of that. I am amazed that nobody has called him, but that is something else again. But we do have the surveys which, I believe, you put in evidence—

Mr. Warner: Yes, that is right.

The Court: —which report on the account of missing and damaged hatch covers and manhole covers as of the initial inspection of the inverted deck. You also have referred to those in giving your opinion.

The Witness: Yes, sir.

The Court: How many do they indicate were open or loose?

The Witness: They indicate one missing and one loose in the rake end, which is reported to have been filled with fresh water, and there are three more indicated as loose, or hanging by chain, in one case.

(531) The Court: Your reference to the rake end and filled with water is to the effect that even if they were open or loose it wouldn't add any more water because they were already filled?

The Witness: Yes, sir.

The Court: All right. Then it indicates three others through which green water could have flooded the vessel?

The Witness: Yes.

The Court: Do you have an opinion as to how they came to be open or loose?

The Witness: I would have to know exactly what the diver intended by the word "loose" in one case there—one of them is noted as hanging by a chain. This could have been a manhole cover that was in place but not secured and when the barge capsized it would have dropped out and have been left hanging by its chain. The others, if he says loose, I imagine that he would mean

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that they were not flush with the deck, the deck surrounding them, which would indicate that they were either, if they were center bolt type, that the bolt was engaged but not tightened, or whatever security arrangement there was, it would be engaged to hold it in place but not tight enough to make it watertight.

(532) The Court: To take the other approach then, which is that there were no substantial leakages in the vessel, you have made your conclusions that the vessel couldn't have capsized, even taking in the maximum amount of water, based upon the survey conditions that required something else to do it—if if you don't take those things into account, and if you deal with a relatively watertight vessel vessel, do you conclude that the crane could have broken loose just from the effect of the sea and without a list?

The Witness: It could have. But I doubt there would have been enough in that case to cause the capsizing.

The Court: You start off by assuming that flooding was a contributing factor to the crane breaking loose, which, when added to the flooding, caused the capsize?

The Witness: Yes.

The Court: Which goes back to the question of why did it flood?

The Witness: I think it is very difficult to escape some conclusion that it did flood because of its condition after the capsizing.

The Court: You are agreeing with the point that (533) I was making earlier that the fact that it was riding so low in the water indicated that there was substantial pre-capsizing flooding?

The Witness: Yes. Substantial or significant.

The Court: Yes. Where did it come from and how did it get there?

The Witness: There is nothing in the survey reports, either before or after, that indicate any substantial damage to the hull—to the shell.

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The Court: Correct.

The Witness: There are openings in the hull provided for normal access, some of those are reported to have been loose. It is not the ideal report. The ideal one would have been the man who was aboard immediately before capsizing who said, yes, he saw these loose and he then left the vessel.

The Court: What evidence there was was to the effect that all manholes and hatch covers were secured and in place and the vessel was tight, taut and whatever other phrases they use in describing such things immediately prior to major marine disasters.

The Witness: The cover that may appear tight to a normal inspection could permit a certain amount of water to enter around it. It could appear tight to the (534) hand. It could possibly work loose due to the motion of the barge, although I don't think this is very likely, and a surprisingly small opening can admit a surprisingly large amount of water over a period of time.

By Mr. Warner:

Q. Is it also possible, Mr. Freelund, that the action of the crane in breaking loose could have ripped out a pad—actually there was some evidence, was there not, that a pad eye was ripped out, and provided an opening through which water could enter? A. In that hypothesis the barge would have been inverted at that time, it would have been floated upside down then.

Q. Well, on the way. A. The amount of water that would be admitted during the process of capsizing would be very insignificant.

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(538) By Mr. Warner:

Q. Mr. Freelund, you recall yesterday that his Honor was asking you how the water might have gotten into the compartments of the barge. A. Yes, sir.

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Q. When we contacted you and gave you various information and asked you to do stability studies, did we ask you to give us your opinion as to how the water might have gotten in there in the first place, or did we ask you to simply assume the worst possible conditions and give us the stability judgment based on that. A. I was asked to assume the worst possible conditions.

Q. When we left yesterday I asked you, did I not, to give some thought to his Honor's question as to means by which water may have gotten into the compartments of the barge. A. Yes.

Q. One of the things that was discussed yesterday was getting in through covers that may have been loose. A. Yes.

Q. I would like to direct your attention to another explanation and ask you if you consider this to be reasonable (539) or not: There was a pad eye that was on the barge, is that correct? A. Yes.

Q. When the barge was found, this pad eye, there has been some evidence, was ripped out. Do you have any indication as to what size hole this was that was ripped? A. I believe there is a survey report afterward that indicated it was approximately six inches square.

Q. If the crane went off the barge at the same time that the pad eye ripped out, it was your testimony yesterday that there wouldn't have been enough time for the water to get in, is that correct? A. Yes.

Q. Might it not be another possibility, within the realm of reason, that the barge movement may have caused the crane to begin motion, rip out the pad eye and still not yet leave the barge until some time after? A. Yes, that's within reason.

Q. Can you tell us how the crane might have moved in that way if the barge were not rolling; in other words, if the barge were not rolling back and forth as the result of the high seas, could there have been some other form of movement that would work its way through to the

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crane? A. The location of the pad, the point of this is (540) marked "rapd"—ripped off on here—which is what the diver's report says. "Is fairly well forward of the crane." The lashing to that pad would have ended more fore and aft than athwartship. So that if the barge were pitching, there might have been a tendency for the crane to work in the fore and aft direction as well as in the athwartship direction that would be caused by rolling.

Possibly in this case, depending on how the crane and the brakes were set on the rollers, the car body itself might work inside the treads, crane treads.

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Q. No. I am asking you in terms of the inherent or initial stability of the barge, would it be resistant to some extent to the rolling motion being created as opposed to pitching? A. I think that perhaps resistant is not the right word to use. That the barge before—before you assume (541) any flood water—was quite stable. There was a very high metacentric height which would give it a short roll period and a very stiff roll where she would tend to return rapidly to an upright position when disturbed. That the actual rolling behavior in the seaway would depend primarily on the relationship between the wave period, the length of the wave in proportion to the natural period of the barge and the dimensions of the barge.

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(542) The Court: They also pitch. Assuming quartering seas, and the evidence supports that proposition since the vessel apparently was moored fairly north-south and the winds were predominantly northwest, assuming quartering seas, and forgetting flooding and the effect of topside (543) weight, would you expect the roll or the pitch to be more pronounced if you were standing midships?

The Witness: I would anticipate that the pitch would be more extreme than the roll.

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Mr. Warner: Yes, your Honor. Thank you.

Q. Mr. Freelund, did you make a comparison—speaking about the barge's stability, did you make a comparison of the characteristics of the barge in that regard as against the Coast Guard standards? A. Well, I compared the Coast Guard requirements to the stability of a seagoing barge with a deck cargo load to the vessel we had here, yes.

Q. Could you tell his Honor what the results of your study were? I assume in order to make that study it required the making of mathematical calculations? A. Yes, it did. On a barge of these proportions, and with the deck cargo height that we have, the Coast Guard—and with the draft, the depth ratio, the Coast Guard assumes that the stability would be satisfactory. However, we went and took the barge at the lower end of their range.

For example, it would require that the deck (544) cargo height be greater than 30 feet and the vertical center of cargo above deck to be above six feet before they would bring it into their range of interest. In our case the cargo center of gravity above deck was 5.3 feet, approximately, and the maximum height of the cargo above deck, except for the gantry on the crane was well under 30 feet.

The Coast Guard would have required a GM of 6.5 feet metacentric height, and the metacentric height that we had in this case was over 39 feet.

(545) The Court: What do you conclude from that?

The Witness: That by any established standards for a deck cargo barge, considering it as the barge not in the working condition with the crane lifting, the stability of the vessel is well in excess of the requirements.

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Avrum Aaron Freelund, for Defendant, Direct

The Court: In heavy pitching there would be severe stresses placed on that line and that pad eye, as the crane moved with the pitching?

(546) The Witness: Yes. The pitching would possibly be associated with surging fore and aft as the barge was pushed aft by sea and the tension in the head lines took over and moved it in the other direction.

* * *

By Mr. Warner:

Q. One final question, Mr. Freelund: If I ask you to assume that the manhole covers that were indicated as being loose were loose, and that those that were indicated (547) as being off—taking the worst ones that could have been off, assuming they were off—assume that condition existed when the barge was left more or less at 9:30, 9:35 on Friday morning; then assume that the seas were very rough and they continued being very rough throughout the balance of that day, throughout Friday; that there may have been some calming during the night, but that things got rough and rough and rougher until continuing through Saturday they got rougher, and rougher and rougher—assume that by approximately five o'clock on Saturday— A. Five o'clock p.m.

Q. Five o'clock p.m. on Saturday, would you expect, if those manhole covers were the sources of the water in the compartment, that by that time, which would have been, I guess, about thirty some-odd hours of this, that the barge would be showing a definite list? A. It probably would be showing a list. It might be difficult for someone not on the barge to determine the extent of that list if the barge was moving violently.

Q. I am not sure that I follow you.

The Court: He is saying that the barge bobbing around so, would it be difficult from a mile away to tell it had list on it. If you were standing on

Avrum Aaron Freelund, for Defendant, Cross

(548) top of the barge, even though it were bobbing on heavy seas, you would know it has list.

Mr. Warner: Is that what the answer was?

The Witness: Yes.

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Cross Examination by Mr. Coates:

Q. Mr. Freelund, are you familiar with a text called Modern Seamanship by Rear Admiral Austin Knight which had been through many revisions and many editions? A. Yes, I am.

Q. Is this the fourteenth edition which I am showing you here? A. That is what the jacket says, yes.

Q. Is it a standard and recognized authority in the field of seamanship? A. It is standard, and I would say its validity is recognized more by some than by others.

Q. Isn't it a compilation of areas under seamanship made by experts and specialists in the areas covered by its chapters? A. It is, but it is oriented more to U. S. Navy practice than merchant practice.

Q. Isn't there a chapter called Damage Control and (549) Hull Preservation in the fourteenth edition? A. I can tell you in a moment. Yes, there is.

Q. You can follow me as I read on Page 42 about a little above mid-page. Do you agree with this statement "Wind and waves are usually dynamic forces. Sudden strong gusts of wind or heavy seas, especially in shallow water, may build up a dangerous roll when the same force applied as a steady pressure would cause no trouble"? A. Yes.

Q. Over on Page 43, would you agree with this statement, "Beam has a great effect on initial stability (GM) since the moment of inertia of the water line plane is a geometric function of the beam"? A. Yes.

Q. Over on Page 46 down at the very bottom having to do with preparedness. One element of preparedness is:

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"Utilization of designed hull safety features at all times when at sea, such as ensuring that watertight boundaries are faithfully maintained." Do you agree with that? A. Yes.

Q. Going to the one No. 4 on the next page, another element of preparedness: "Ensuring proper amount (550) and distribution of liquid and other cargo and ballast." A. Yes.

Q. Going down to mid-page where it says "Enemies of stability:" "If a ship's tank or void is only partially full the liquid contents may slosh back and forth with the motion of the ship. This effect is known as free surface. A similar effect is noted if a compartment is partially flooded." A. I think that is a simplification of what is meant by free surface. Free surface effect.

Q. Would you want to expand on it in any way? A. This implies that it is due to the sloshing of the water which you consider a dynamic effect, and the free surface that is considered a stability calculation—in stability calculations as that due to the transfer of weight with the inclined water plane in the tank, without considering the fact that the water is sloshing back and forth—

Q. Isn't it essentially water picking up momentum and— A. No, it does not consider the water picking up the momentum. You treat free surface in a conventional static stability calculation.

Q. I am not talking about static, because if you (551) were static you would have no free surface effect in operation, is that correct? A. The term free surface effect is generally used in relationship to the static stability calculations and it relates to an effective or a virtual increase in the height of the center of gravity if the surface of the water in the tank is not confined, because the water can shift to the low side. It is not the dynamic effect of the water moving that is considered—

The Court: What do you call the dynamic effect of the water moving?

Avrum Aaron Freelund, for Defendant, Cross

The Witness: If you called it anything, you would call it dynamic free surface effect.

The Court: From a damage control standpoint, at least militarily as used in Knights, they use the free surface effect phrase to describe the dynamic, since that is what they are more concerned with than the construction.

The Witness: I don't believe so, because from my experience with naval damage control procedures, the free surface allowances and corrections that are made are conventional static free surface—

The Court: You are looking at it from a marine engineering construction standpoint, and most of (552) these works like Knights are concerned with what you do with a vessel that is in trouble, and they're concerned with it from the standpoint of the effect of the water in the compartments has as it starts sloshing about—however, we are dealing with semantics. The forces in action are not in question.

Mr. Coates: I have two more things on free surface here, your Honor.

Q. A little further down on the page "Free surface and free communication with the sea are, when combined, the deadly enemies of stability. There is little excuse for free surface. Tanks partially full should generally be ballasted. The captain who takes a ship into heavy weather with free surface in his tanks is foolhardy. The ship with initial free surface which is damaged so that it also acquires loose water and free communication with the sea will almost surely be in danger. Free surface should be avoided since it always causes a reduction in GM and overall stability."

Do you agree with that? A. Yes. I do agree with it. If I may point out, he is referring to GM or metacentric height, which is a concept related to static stability.

Q. So that is where you start. Then you factor (553) an additional thing which you call free surface effect and

Avrum Aaron Freeland, for Defendant, Cross

you get a completely different dynamic result, is that correct? A. No, I don't think so. He says free surface should be avoided since it also causes a reduction in GM. The free surface that we are talking about in this context is the free surface in relation to the static stability and the GM metacentric height is a concept related to static stability.

Q. Then the last one on Page 210: "The effect of 'free surface' water in bilges and compartments is particularly important during heavy weather when a ship's stability is severely tested. Pumps must be kept operable to remove water; electrical switchboards must be kept dry. This points up to the need for making watertight closures well in advance of the onset of the worst part of the gale. To minimize free surface effect it is advisable, particularly when bad weather is expected, to keep all tanks containing liquid either full or empty." A. I agree with it. Again, he is talking about a ship.

The Court: How many watertight compartments does this barge have?

(554) The Witness: Eighteen watertight compartments and two smaller fuel oil compartments.

The Court: Are they all roughly the same size, excluding the fuel oil ones?

The Witness: No, the compartment is outboard of the wing bulkhead are farther rear than the steerline compartment is and the rake compartments are much shorter.

The Court: That is a standard marine engineering technique, isn't it, because the dangers of free surface effect increase on the outboard compartments will be subject to more movement than the inboard compartments?

The Witness: No. The free surface effect is related strictly to the width of the compartment, and the direction in which you are considering the stability.

The Court: From the standpoint of the dynamic free surface effect, considering that the outboard section of

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a vessel moves further in a roll than the inboard compartments, do you not get more dynamic effect on the outboard sections than you do on the inboard sections?

The Witness: Well, the angular change is the same in the outboard ones than in the inboard ones. If you were considering the dynamic effect, the effect of (555) transverse acceleration would tend to move more water outboard. For a compartment low in the hull section listed on the water plane there is very little transverse acceleration of rolling. It—I think the difference would be negligible between an inboard and an outboard compartment. (556) The Witness: There is something else I might point out. As far as the concept of the water sloshing back and forth, this would be related to the natural period of the tank, that if you took the part with water in it and disturbed it you could get motion of the surface of the water and the natural period that I calculated, the longest natural period in the simplest mode for the tanks is approximately a half a second. So I don't think that sloshing in a sense of the water moving back and forth—it doesn't ballast, when it ballasts standing still in the water moving back and forth is a different period than the natural period of the roll.

The Court: How about the fact that if your free water is in a central compartment it has less of a listing effect than if your free water is in an outboard compartment, being closer to the center of the vessel and the center of gravity?

The Witness: Well, the listing effect of free water is in two areas: One is just due to the weight of the water itself. This obviously is greater if the water is off the center line rather than on the center line. The second effect is the effect of the surface, that as it—to use an analogy, if you are carrying a shallow tray full of water and you get a slight displacement (557) of the tray, a slight angular displacement the water tends to move to the low side. It doesn't have to slosh, it just moves, and

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with a slight angle on the tray of water there is more weight on the low side than the high side. This is related to merely the surface area of the water, provided there is enough depth of the water for it to remain continuous and not be—

The Court: Perhaps I am not stating it clearly enough. Assume the vessel had—well, simplify it, eighteen watertight compartments arranged in three rows of sixes, in other words, an outboard set on each side and a midline set, six in a row. If the six midline compartments flooded, would you have the same stability—would you have the same instability factor as you would if either set of the six outboard compartments flooded?

The Witness: Assuming the compartments are all the same size?

The Court: Yes.

The Witness: If the six outboard compartments is on one side flooded, in addition to the free surface effect, which is one reduction in stability, you would have a list put on the vessel due to the off center weight.

The Court: Yes.

(558) The Witness: The reduction in the metacentric height in that case would depend on the angle of list and the effect that this had on the water plane and the underwater shape of the vessel.

The Court: Whereas in the six midline compartments, if they flood, you would not normally get a list?

The Witness: No. Unless they flooded so severely as to put her in a condition where she had no initial stability and developed a righting arm—

The Court: The flooding of outboard compartments is a more dangerous situation than the flooding of inboard compartments, everything else being equal?

The Witness: Yes. Not so much do you have to the free surface effect as to the transverse weight.

The Court: I understand that.

The Witness: Yes.

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By Mr. Coates:

Q. Mr. Freelund, turning to your testimony of yesterday, you assumed, did you not, that there was fresh water ballast in the rake compartment at the boom end of the barge? A. The trailer end, yes.

Q. Did you assume whether that was fully ballasted or pressed completely up or not? (559) A. For purposes of weight, I took it as being pressed completely up, but I allowed for a full free surface in the compartment nevertheless. Even though that is inconsistent with the tank being completely pressed up, I allowed for that. It was a less favorable assumption.

* * *

(561) Q. When you made your calculation which lead you to the conclusion that flooding alone of the compartments that you were considering to be flooded, you didn't add into your calculation any dynamic factor such as a wave and wind action, is that correct? A. I think it is again necessary before answering that, that, to point out that I was talking about static stability and the conditions in still water, that there was no attempt made to make an analysis of the motion of the vessel in response to excitation by waves. When I said that the flooding alone was not sufficient to cause capsize, what I was saying was that the amount of water in the vessel would not cause her to totally lose static stability.

Q. There has been testimony concerning the boom (562) going overboard and being damaged by that. Assume that the boom was lowered into its cradlings and assume that it had a topping lift that was made snug, and then assume that the boom came out of the cradlings or the cradlings failed, either one, wouldn't the boom just swing out laterally and miss the deck of the barge altogether? A. Well—

* * *

Avrum Aaron Freelund, for Defendant, Cross

(564) The Court: I think what he is attempting to elicit from you is that if we assume a starboard list of substantial amounts, and if we assume that the boom works out of the cradlings because of pitching coming out on the starboards of the cradlings, and if we further assume that the boom then swings to the downhill side, which is the starboard side, and swings, let us say, 45 to 90 degrees, either way, to the right, is there anything on the surface of the vessel which it would necessarily strike, considering that the boom's height above the deck was fifteen feet?

The Witness: I think in that case it would be likely to have struck the trailer office, but I never did hear what happened to the trailer office.

(565) The Court: The boom was on top of the trailer to start off with, it was higher than the trailer?

The Witness: It would have had to drop when the slack was taken out of the—

The Court: It would have dropped almost down entirely on top of the trailer office, and it would have slid toward the starboard side until it cleared the trailer office. Is there anything else that the boom would hit if it continued to swing toward the starboard side?

The Witness: No.

* * *

(566) By Mr. Coates:

Q. I believe you referred to a report made by Mr. Janes, an engineer, concerning the house lock device? A. Yes.

Q. What did you say his finding was? A. His finding disclosed that the mechanic had investigated it and said that it was at the time he examined it disengaged, but he didn't report any damage or malfunction—apparent malfunctions of it, and he reported other damage to the crane. From that I conclude that there was no—there was no damage to the house—

Avrum Aaron Freclund, for Defendant, Cross

Q. There was no damage to the house lock? A. Yes.
(566-A) Q. I ask you to assume that when the crane was raised, salvaged, it was observed to be swinging. What does that tell you concerning whether or not the house lock was engaged at the time of the capsize? A. Well, I know from my own knowledge the assumption is incorrect because the crane was not swinging. It swung once.

Q. If it swung at all— A. It took a new position. It indicates then that at the time that the house rotated, the house lock was not engaged.

The Court: Does that mean before it went off the vessel or after?

The Witness: No. At the time it was seen to rotate, which is at that point the bed of the car body, which was normally supposed to be horizontal, was vertical. The pin, the center pin was horizontal and the car body was vertical instead of the other way around.

The Court: Why should that affect the locking of it?

The Witness: Well, it would need a discussion of the arrangement of that house lock assembly. I can go into that, if you would like.

The Court: You say it would affect it? In (567) other words, the fact that the crane and house body had movement in it when being raised does not, to you, necessarily mean that the house lock was not engaged at the time before the crane left the barge?

The Witness: Yes.

Mr. Coates: What we are getting at here, he said it wasn't sheered, so that the swinging wasn't because the house lock had failed.

The Court: I understand that. But you are implying now that perhaps the house lock was never engaged because when it was raised it did move once.

Avrum Aaron Frcelund, for Defendant, Cross

He is suggesting that this is a condition peculiar to having the crane on its side rather than upright, and that had it been upright this possibly would not have occurred.

Am I correct, that is your position?

The Witness: Yes. This is based on the examination of the drawings showing how the house lock operates.

• • •

(569) The Court: While they are looking for that, I am not certain I understand your position vis-a-vis the stability of the vessel under sea conditions.

If we take the assumptions you used concerning the worst stability condition possible in terms of flooding, and if we assume no movement of either the crane or the boom, and if we take the moored position of the vessel with (570) a thousand foot leads on the crane end, one to an anchor and one to a cement weight, and if we accept what we have been told that there was very short leads on the trailer end, 100 and 150 feet, also to fairly heavy concrete moorings, the net effect of which was to prevent much swing to the barge, and if, as we are told, the winds could have been in the vicinity of 50 knots and coming primarily from the northwest, almost continually from the northwest for a period of time, and if the vessel capsized toward the direction of the wind, could this have occurred simply from the flooding, without any movement of the crane or boom or anything else topside, in your opinion?

The Witness: Yes, it could have.

The Court: You are in substantial agreement then with the other expert. It could have happened, although apparently the feeling is that that is not the way it did happen.

The Witness: Yes.

The Court: Incidentally, if the boom did in fact break loose first, and start swinging, would that not have been

Avrum Aaron Freelund, for Defendant, Re-direct

an additional stress upon the crane mooring causing the crane itself to break loose before capsizing?

The Witness: Yes, it would.

The Court: So that in fact the capsize may have (571) been due both to the crane coming loose and the boom coming loose?

The Witness: Yes, it may have been.

The Court: Conversely, if the crane starts to move around and starts to break loose, that will disturb the arrangement of the boom in the cradle and make it more likely that the boom is going to come loose?

The Witness: Yes.

* * *

(578) Q. You said this was a stiff rolling type of vessel because of the flat bottom? A. No, because of the high metacentric height. The flat bottom—

Q. The flat bottom contributed to the high metacentric height? A. Yes.

Q. Would that make for a snappy roll in these conditions? (579) A. Yes.

Q. In other words, it would be a certain jerkiness, is that correct? A. I don't know if jerkiness is the word. That the roll period would be short.

Q. Assuming some free surface out there, would the surging of the water back and forth within compartments affect the period of roll and the period of pitch, one or both of them? A. Yes.

* * *

Re-direct Examination by Mr. Warner:

Q. Mr. Freelund, would you define for the Court what slosh period or sloshing period refers to? A. It would be the natural period of the—in reference to a tanker, it would be the natural period of the water in the tank.

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Avrum Aaron Freelund, for Defendant, Re-cross

(581) *Re-cross Examination by Mr. Coates:*

Q. Mr. Freelund, I show you Exhibit 7A again, which is your diagram. The barge was 135 feet long, is that correct? A. Yes.

Q. What is the longest compartment, speaking of fore and aft compartments, in which there is no transverse bulkhead separating it, what is the approximate length? A. I don't have the length. Offhand, it is the wing compartments outboard of the crane, the crane end of the barge.

Q. Do you have the transverse bulkheads put in here at all? A. Yes.

Q. Where are they? (582) A. These are the transverse bulkheads.

Q. The dotted lines? A. Here.

Q. Assuming that the barge is 135 feet long on the port side from the northerly part of the crane going forward up to about the diesel hammer, what is the approximate length of that compartment— A. Perhaps 80 feet or so. Just an estimate.

Q. So if you had—

The Court: 80 feet.

The Witness: 70 to 80 feet.

The Court: I thought it was only 135 feet overall.

The Witness: This is better than half the length of the barge.

The Court: Is it?

The Witness: Make it 70 feet. It is approximately half the length of the barge.

Q. So if you had water in that compartment, and if you had pitching, which you said was more severe than rolling, you would have quite a lot of free surface effect in that compartment, would you not? A. Yes.

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(587) The Court: While you gentlemen are conferring, I want to ask the witness a question: This report, Ex-

Avrum Aaron Freelund, for Defendant, Re-cross

hibit U, makes reference to "The house locking device not being engaged and the swing brake on and locked."

Could you tell me the difference between the swing brake and the house locking device?

The Witness: The swing brake is a friction brake that controls the house rotation and the house lock is a positive mechanical lock that prevents house rotation when it is engaged.

* * *

(588) Q. When Mr. Coates was questioning you before, he asked you to make a certain assumption concerning the movement of the crane when it was lifted out of the water? A. Yes.

Q. And you didn't make that assumption, saying that you knew for a fact that it was incorrect, is that right? A. Yes, about swinging back and forth.

Q. How did you know that for a fact? A. I was aboard the Century when the crane was lifted.

(589) Q. So you actually were present and saw it come out of the water? A. Yes.

* * *

Q. You also heard the testimony of Mr. Tiedemann in regard to the lock that was operating, the locking mechanism? A. He described, in his testimony yesterday, something which he referred to as the boom lock.

Q. The boom lock. I want you to assume a reference to the house lock by that. A. Yes.

Q. The house lock on the barge, was that— A. Excuse me. You mean on the crane?

Q. On the crane which was on the barge. Was that an hydraulic mechanism? A. No.

Q. What was it? (590) A. Pneumatic.

Q. Have you examined the operating manual in regard to the crane and the functioning of that house lock mechanism? A. Not the operating manual, the parts drawings.

Avrum Aaron Freelund, for Defendant, Re-cross

Q. The parts drawings, that is what I mean. A. Yes.

Q. There has been some discussion about the possibility of the boom swinging. A. Yes.

Q. I direct your attention to Exhibit U, which is the report of Mr. Janes, the engineer. A. Yes.

Q. That is what his Honor referred to before. Do you recall that Mr. James mentioned the house lock as having been not in the engaged position, is that right? A. Yes.

Q. There was mentioned of other aspects of the crane being damaged? A. Yes.

Q. And there was no mention of the house lock being damaged? A. Yes.

Q. Would you explain to the Court what relationship, (591) if any, you see between an undamaged condition of the house lock and the hypothesis that the boom may have been swinging when the crane was in an upright position? A. Well, there was the statement of the crane operator who secured the crane that the house lock had been engaged before he left the crane.

Q. How does the house lock operate? A. Well, we have to describe the mechanism for rotating the cab of the crane.

There is attached to the car body or lower track portion of the crane a fixed large diameter gear. The crane cab is rotated by means of a pinion extending below the floor of the cab and engaging that large gear.

As the pinion turns it walks the crane around the fixed gear. The pinion drive mechanism has a friction brake on it. This is the swing brake.

In addition, there is a mechanical arrangement which is a segment of an internal gear which is hinged so that it may be either engaged into the teeth of the fixed gear to lock the house with relation to that gear, or lift it out.

The gear is lifted out and engaged by means of a

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pneumatic or air-operated cylinder, a double-acting cylinder.

(592) When the gear segment is disengaged, it is engaged by positive mechanical action. A lifter engages—comes up under it and engaged an extension of the gear segment and under the air pressure lifts it out.

However, when it is engaged, in order to prevent interference, if there is an attempt to engage it when the teeth of the gear don't line up exactly with the teeth of the segment, there is a spring interposed between the operating arm and the gear.

So that when the operating arm reaches the engaged position the gear segment may be just bearing against the teeth on the gear fixed to the crane body, and after a very slight rotation that permits the teeth to drop in, the spring will then pull it into position.

When it is in that engaged position it is retained there by a combination of the spring force and the gravity, that is, its own weight holds it in the lower position.

It is a fairly robust structure.

Now, if that were engaged, and the crane body nevertheless rotated, it would mean there would have to be a failure of that structure, either teeth broken off the ring gear attached to the car body, or the house lock mechanism itself would have had to have been damaged.

(593) The report of Mr. Janes indicates that there was no damage.

In the listing of the repair parts determined by Manitowoc, they listed the only repair parts needed there were the spring, the bellows, which seals the arm of the air cylinder, and the air cylinder.

So the fact that the spring was broken, or had to be replaced, bolstered the belief that I had that when the crane—were the crane in a vertical position not in its horizontal position, and were there no air pressure maintaining the operating arm of that linkage in the engaged

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position, or if the air lines to the cylinder were damaged or broken or through any number of possible mechanisms, if the operating arm were free to move as the crane left its horizontal position to vertical position, the house lock could have dropped out by gravity.

In this case there was not even the spring to hold it engaged, since the spring is shown as being broken.

If it did drop out, that would account perfectly for the fact that it was seen to rotate upon leaving the water and nevertheless could have been locked and left by the operator in the locked position when it was secured.

In addition, even if that spring were broken, (594) the way the mechanism is designed, the spring being broken would not positively prevent the lock from engaging.

* * *

(595) Q. Is it correct to assume that the boom cannot swing around while the house lock is engaged, unless it breaks the house lock? A. Yes.

The Court: What broke the spring?

The Witness: I don't know what broke the spring. The report here said that it had to have been replaced. Springs—the drawing shows that it is a coil spring and they have been known to break at the points where the coils are bent up at the ends.

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The Court: You have no idea what would have caused the spring to fail?

(596) The Witness: No.

* * *

Q. In any event, is it reasonable to assume that in the action of capsizing of a crane weighing 182 tons, and a boom weighing approximately 27,000 pounds slamming into the water underneath a capsizing barge, that something might have happened to the spring to cause it— A.

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Yes, something might have happened then. But I don't think it is necessary to assume that. The spring could have been broken at any time—the last time it was engaged the spring might have failed. The last time the load was put on the spring, that might have been the (597) time when it failed. It wouldn't have prevented the lock from engaging.

The Court: Could you lock the thing without the spring? If the spring was not operating before the vessel capsized, is the mechanism such that the lock will drop into place from gravity, and so long as the vessel stays upright, stayed locked, or is the spring an absolute necessary part to engage the lock in an upright position?

The Witness: In the upright position, the spring is not necessary to hold it engaged.

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(598) Q. All right. The swing brake was found to have been engaged? A. Yes.

Q. And there is no mention of the swing brake having been broken, is that right? A. Correct.

Q. Is it possible for the crane and the boom to have swung around at the point where it rotated without breaking the swing brake? A. Yes.

Q. Would it be proper, Mr. Freelund, to analogize the operation of the swing brake on this crane to the action of, let's say, an emergency brake on a car? A. Yes, very proper. In that case the swing lock would be analogous to the park position on your automatic transmission.

Q. If you try to drive from the park position, (599) if you succeed in moving you're going to break something, is that what you mean? A. If you can do it.

Q. On the other hand, you can drive with the emergency on and you won't necessarily break the emergency, although you will wear out the pads? A. Correct.

Q. Mr. Freelund, I would like you to assume that the house lock was not engaged at the time that the crane was left at 9:45 A.M. on Friday.

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I know that there is evidence in the record that it was engaged. I am asking you to ignore that and assume that it was not engaged. I want you also to assume what you know about the crane, and you know its weight, right, you know the weight of the boom? A. Yes.

Q. And all the other characteristics of the crane? A. Yes.

Q. I want you to assume, also, that on Friday morning at 9:30, that day, that there were rough seas, and that there was a lot of motion out there on the water.

If the crane had been left with the house lock unsecured, or disengaged, would you expect, from the action of rough seas upon the vessel, to have seen some movement (600) of the boom, let's say, by 2:30 that afternoon? A. Yes.

Q. That would be about five hours? A. When we say "movement of the boom," we are referring to rotation or swinging of the cab, rotation around the center pin, moving the boom around the vertical center pin of the crane?

Q. That's right. A. The motion that the swing lock and swing brake controlled?

Q. That's right. A. I would, from the fact—also considering the fact that the brake held the crane for a considerable time after it was raised and then permitted it to rotate, from that evidence that the brake was engaged at the time you are talking about, that I would see no reason to suppose that the motion, if any, of the cab that developed would have happened late in the weather period, that the brake holding force would appear to have been at least as good at the end as in the beginning. There is nothing to indicate that the brake worked loose or lost its force, so I would expect that if there were motion of the crane, rotation around the swing axis, that it would have been going on all through the period of the heavy motion of the crane.

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Avrum Aaron Freelund, for Defendant, Re-cross

(609) The Court: Since you saw it in a relatively good state after it was brought up from the bottom, you would conclude that there were no excessive frictions over a long period of time?

The Witness: Yes, that it was still able to exert a considerable restraining force against rotation of the cab.

The Court: So that your total conclusion based upon all of the facts is that the house lock mechanism was engaged until such time as the vessel capsized?

The Witness: Yes.

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(615) The Court: That is fine. I notice a singular lack of answer to my question about your position as to the (616) mooring lines.

Mr. Gillers: We haven't had our thirty seconds, your Honor.

The Court: In my opinion that is your Achilles heel vis-a-vis the conditions.

Mr. Gillers: If in fact the warranty is a warranty, if it was in effect, and if the Inchmaree argument is not successful, then we have to deal with the substantive factual issue, your Honor.

The Court: That is what I am submitting to you, and I am wondering what your position is on that factual aspect. I think you are in a much stronger position with the boom than you are with No. 3.

Mr. Warner: I agree. I think we definitely are reluctant to reach the heel, no doubt about that. But our position with regard to 3, your Honor, is that there was no reason on Thursday to do Condition 3 because it was flat and calm—

The Court: There was reason on Friday, and there was no great problem involved in slacking off the aft lines. You had fourteen hundred feet of cable on the drum. It was only 100 to 150 out. It wouldn't have taken but a few minutes to slack off the rear lines.

Avrum Aaron Freelund, for Defendant, Re-cross

Mr. Warner: Part of our contention is, (617) your Honor, when it did become reason to do it, the only forecast for a northeast storm was an hour and fifteen minutes after everybody was off the barge. That would be No. 1.

No. 2, the position of the entire barge would have had to have been changed because the position of the barge on Thursday, when the workers got there on Friday, was based upon the flat and calm conditions placing it close to the platform, so that had there been this slacking off so that there could have been movement, the platform itself would have been damaged.

The Court: Not necessarily. They could have slacked off on the rear maybe as much as five hundred or seven hundred fifty feet, without allowing enough swing for a southerly wind to bring the barge toward the construction site. Moreover, nobody even suggested the possibility of southerly winds. Southerly winds across Long Island would not be terribly strong and would not be anticipated at that time of the year. The long and short of it is there is nothing in the record to explain why Green left the shore side mooring lines in such a tight crossed condition. He was never asked in his depositions. He hasn't appeared to testify. Nobody has offered any explanation.

(618) We were left with nothing but the conclusion that it was an awful goof, on which you then turn to the Inchmaree clause and say he was a poor master.

. . .

(621) Mr. Coates: Not on that. On the other point about the possibility of the barge swinging into the platform, I am not a meteorologist, but typically the northeaster will have the winds backing from east—

Thomas Doyle, for Plaintiff, Direct

The Court: I have already commented on that. I think it to be a possibility so unlikely as not to have been a threat. If that was the reason he didn't do it, he didn't under the mechanics of north-east storms or even the typical December storm in Long Island.

You almost never get winds from the south.

Mr. Coates: Well, usually it goes around to the northwest and then drops off before it comes up from the southwest again.

(622) The Court: It almost never reaches south, however. And it would have required almost direct southerly winds to have brought it back onto the construction site.

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(623) THOMAS DOYLE, called as a witness on behalf of the plaintiff, being first duly sworn, was examined and testified as follows:

Mr. Warner: Your Honor, this is a witness being taken out of order.

The Court: Correct. I have already noted that.

Direct Examination by Mr. Coates:

Q. Mr. Doyle, where do you now reside? A. Albany.

Q. For whom do you now work? A. General Dynamics.

Q. Where is that, what part of the country? A. Connecticut, but the job I am working on is in West Milton, New York. It is part of Saratoga County.

Q. For whom did you work in 1972 starting around August, September? A. Mr. DeLong.

Q. Was that name changed to Hersent Offshore? (624)
A. Yes.

Q. What was your job capacity when you first went to work for DeLong or Hersent? A. Welder. Dock builder.

Thomas Doyle, for Plaintiff, Direct

Q. What were your duties, your job functions in August or September? A. I think it was September.

Q. Where did you work for Hersent—I will call it Hersent from now on. A. About a mile and a half off-shore from the Northville Industries, Mattituck, Long Island.

Q. Was this a platform that was being constructed for taking tankers, taking discharge of fuel from tankers? A. Yes.

Q. And loading and unloading platform? A. Right.

Q. Did you work aboard a barge? A. I did.

Q. What was the name of the barge or the number? A. It was a Hughes 136.

Q. Were there a group of dock builders that worked aboard the barge during September up until a certain point in mid-December? A. Yes, there was.

(625) Q. About how many were in the group? A. There were three welders and I believe there were four other men. That would be about seven, maybe eight.

Q. Were there engineers, operating engineers? A. Yes, there were, approximately three.

Q. What equipment would they operate? A. One worked a compressor, took care of the compressor. One was an operating engineer. He operated the Manitowoc and there was a maintenance man.

Q. When you say the Manitowoc, you mean the crane? A. The crane.

Q. Did you have a foreman? A. Yes, I did.

Q. Who was he? A. Originally?

Q. Well, let's go onto December. A. Frank Carr.

Q. From whom did you take directions in welding whatever it was you were supposed to weld? A. Frank Carr.

Q. Were there people who operated winches aboard the barge? (626) A. Yes.

Q. Were they the engineers? A. They were dock builders.

Thomas Doyle, for Plaintiff, Direct

Q. From whom would the winch operators take directions? A. Dockbuilder foreman.

Q. Frank Carr? A. Right.

Q. Were there times in December of 1972 when the barge was moved at the site? A. Yes.

Q. For instance, at the end of the day, what type of movements were made? A. We would move away from the platform.

Q. Was that by use of the winches? A. Yes.

Q. Who gave directions in connection with that? A. Frank Carr.

Q. Who is Mr. Robert Green? A. He was the superintendent on the job.

Q. Did he give you directions in connection with what you testified to so far? A. No.

Mr. Gillers: I didn't hear the last question.

(627) (Question read.)

Q. Were there times when pumping or dewatering was done for that barge, or water put in, in or out of tanks? A. Yes, there was.

Q. Who gave you directions with respect to that? A. It would be the foreman.

Q. Were there times when equipment would be lashed to the dock or secured in one way or the other? A. Yes.

Q. Who gave you directions in connection with that? A. The foreman.

Q. Were there times when the barge was brought into Mattituck Inlet? A. Yes.

Q. In connection with your duties at that time, who gave directions with respect to bringing the barge back into Mattituck Inlet? A. Would you repeat that or clarify that?

The Court: Were you involved in moving the barge back to Mattituck?

The Witness: Yes.

The Court: What did you do?

Thomas Doyle, for Plaintiff, Direct

The Witness: Handled lines. In other words, (628) secured the barge tug for towing purposes and retrieving the anchors.

The Court: Who would give you your directions concerning those functions?

The Witness: The foreman.

Q. What about the crane operators, say the man up in the cab, when the crane was doing something, who was directing that operation? A. The foreman would direct the crane operator what to do.

Q. How would he do that? A. By a procedure, hand signals.

Q. There were times when you saw Mr. Robert Green out on the barge, is that correct? A. Yes.

Q. Did he ever give the crew, and when I say the crew, not only the dock builders but the engineers, directions? A. There was only one time that I remember Mr. Green having to do anything to do with us directly. That was when they originally set the platform in place. He had worked in conjunction with the transit operators off-shore and relayed signals how and where we should be setting up for the original platform, the original (629) station that was put.

Q. That was one occasion— A. But he never gave us directives personally.

Q. On the occasion the tug was brought back into Mattituck Inlet, was Mr. Green aboard the Large? A. Not necessarily.

Q. What you are saying, maybe on some occasions he was and some he wasn't? A. Yes.

Q. When it came to tying up the barge at Mattituck Inlet, who was directing you? A. The foreman directed us on lashing it up.

Q. What did you consider Mr. Robert Green's job title and job function to be?

Mr. Gillers: Objection.

The Court: Sustained.

Thomas Doyle, for Plaintiff, Cross

How did you phrase that?

Mr. Coates: What did you consider?

The Court: That is not a good way.

Do you know what his title was, Mr. Green?

The Witness: What the company called him?

The Court: Yes.

The Witness: I don't even know what we called him.

(630) Mr. Warner: Objection.

The Court: I will allow it if he knows anything.
He already said he didn't know.

Mr. Warner: It is coming in as a characterization.
It is the same thing I objected to before.

The Court: Did you ever have occasion to speak with him concerning his title?

The Witness: I am not really too sure.

The Court: I assume you spoke with Mr. Green on occasion?

The Witness: On occasion we did, yes.

The Court: Were there ever occasions on which Mr. Carr would refer to Mr. Green by title rather than by name?

The Witness: I believe so.

The Court: What did he call him?

The Witness: Superintendent.

Mr. Coates: You may cross examine.

Cross Examination by Mr. Warner:

Q. Who gave orders to Mr. Carr? A. I would have to presume Mr. Green.

Mr. Warner: Thank you.

Nothing further.

(631) The Court: Do you know who made the decisions about whether to bring the barge in or leave it out?

The Witness: No.

Thomas Doyle, for Plaintiff, Cross

The Court: Do you know who made the decisions about whether to moor the barge and how to put the lines out?

The Witness: That was told to us by Frank Carr.

The Court: Do you know whether he made those decisions or whether they were made by somebody else?

For example, on the morning of December 15th when the wind was blowing and you were taken back off the barge, who made the decision to take you off, do you know?

The Witness: I believe it was Frank Carr.

The Court: Did he speak with Mr. Green before making this decision?

The Witness: Not to my knowledge.

The Court: Was Mr. Green there?

The Witness: I do not recall.

The Court: Okay, you are excused.

Take the stand again a moment.

Do you remember that particular morning, the last morning before the barge overturned?

(632) The Witness: Yes.

The Court: Describe the weather conditions.

The Witness: I can tell you that the weather conditions were rough because the water went over my head and I was eight feet lying on my belly in on the side of the barge welding the pad eye.

The Court: The water came eight feet—

The Witness: I was in eight feet from the edge, I was welding a pad eye down. I was welding on my belly about six inches off the deck laying on two planks and the water completely covered me.

The Court: This pad eye you were welding, where was it located on the barge?

The Witness: It was holding the hammer down, sir.

The Court: Did you complete the weld before they took you off?

The Witness: I don't know if I did or somebody else did. In other words, the water literally came over me or up over my mask. I didn't see the weld because the water actually engulfed me, completely covered me.

Avrum Aaron Freelund, for Defendart, Cross

The Court: Was there another pad eye to which lines running to the crane were affixed?

The Witness: Yes, there were.

(633) The Court: What kind of lines were attached to that pad eye?

The Witness: I believe they were inch rope, metal rope.

The Court: Was there anything wrong with the pad eye the last time you saw it that day?

The Witness: No, sir.

The Court: How often were the watertight hatches to the compartments secured? How often were they checked and tightened?

The Witness: There was no frequency of procedure on tightening hatches to my knowledge. They weren't paid exclusively attention to if that is what you mean. In other words, they could have been left loose or they could have been left open.

The Court: Whose responsibility was it to see they were tightened before leaving the vessel for a period of time?

The Witness: The responsibility would fall on the foreman.

The Court: On the morning of this Friday before the barge overturned, had you winched the barge forward to the working area before you decided the weather was too rough?

The Witness: I do not recall. In other words, if we had moved the barge at all that morning, I do not remember his getting my job assignment to secure the hammer and that is what I did with another welder.

The Court: Was that what you would have done in any event or did you do that because of the rough weather?

The Witness: That was done because we were getting bad seas.

The Court: And you wanted to be sure that the hammer was tied down tightly?

The Witness: It was, yes.

Thomas Doyle, for Plaintiff, Cross

The Court: Were any special precautions taken with respect to the crane or the boom that you can recall?

The Witness: None.

The Court: Can you recall whether any particular attention was taken to the mooring lines so that the vessel swung into the seas?

The Witness: I do remember the lines being taut that morning or left taut.

The Court: At the time you were working on the deck, which direction were the winds coming from?

The Witness: They would be coming from the east, because the barge as it was situated would be (635) going north and south.

The Court: Correct. With the shore being back to south and the winds were coming from the easterly side?

The Witness: No.

The Court: To your right as you faced away from shore?

The Witness: Yes, that is the reason I got wet because that is the way the water came over.

The Court: And no attempt was made to loosen the lines to allow the vessel to swing so it would face the wind?

The Witness: Like a ship's bow?

The Court: Yes.

The Witness: No.

The Court: Do you know whether that was ever done? Did they ever loosen it up so it would swing like a ship into the wind?

The Witness: Not to my knowledge.

The Court: Did you ever hear anybody discuss the value of allowing the vessel to swing so she would face into the wind and not take waters broadside?

The Witness: Yes, quite often.

The Court: Was it ever discussed while you (636) were on that barge, I mean?

The Witness: Before and after?

Thomas Doyle, for Plaintiff, Cross

The Court: Before.

The Witness: On that morning, no.

(637) By the Court:

Q. How about previous to that morning but while on that barge? A. It was discussed by another foreman.

Q. The previous foreman? A. Yes.

Q. With whom did he discuss it? A. Kenny Johnson and I believe Tommie, another dock builder on the job. He is dead now.

Q. What did he say?

Mr. Warner: Your Honor, I would object to that.

The Court: Well, he was a foreman for Hersent and that is a managerial type of position.

Mr. Warner: Your Honor, I would beg to differ with the Court. I think the foreman in this situation is a mariner position.

The Court: I don't know, perhaps.

I will overrule your objection to my question and allow him to answer it.

Would you repeat it, please.

A. Yes.

Q. What did the previous foreman say to these other two workers about the slacking off of lines to let the (638) barge ride into the wind? A. I believe he would like, I guess you would call it a conference, explaining why we set up the line the way we did, why he wanted them set up and where.

Q. What did he say with respect to the winds and slacking off the lines so the barge could swing? A. In respect to that, it was all set up so the barge would never come into contact with the platform and to leave a certain amount of slack ordinarily so the barge would stay safe.

Q. His prime concern was that the lines were never suf-

Thomas Doyle, for Plaintiff, Re-direct

ficiently lengthy to allow the barge to come onto the working project? A. That is right.

Q. He didn't discuss the opposite aspect, the question of keeping the barge sufficiently loose so it could swing around as the winds changed, did he? A. When we set our lines out, it is customary, the way he explained it, set everything up, there was enough slack ordinarily to turn around and accommodate a certain amount of change in the winds.

Q. Did he do it the same way it was done on the particular Friday in question? The evidence is to the effect that the lines running out in connection with the (639) project were quite long, a thousand feet, but the lines in the opposite end running away from the trailer, were quite short, 100, 150 feet and they were crossed, more or less pinning down the vessel right where it was and preventing it from turning as the wind shifted. Did the previous foreman do it the same way? A. No. Yes and no.

Q. How did he do it? A. We used different anchors.

Q. Where were they? A. Approximately the same place but they were smaller.

Q. How about the crossing of the rear lines? Did he cross his rear lines? A. On occasion.

Q. Were you standing by on the Saturday that the no work was done? A. No, sir, that weekend I went home.

The Court: I have no further questions.

Re-direct Examination by Mr. Warner:

Q. Do you recall what time the work crew was dismissed for the weekend and what time they were told to report back for further work? (640) A. That Friday morning. We were told to come back on a Monday.

The Court: Do you know whether any consideration was given by anybody on that particular occasion to the desirability of bringing the barge back into Mattituck Harbor?

Thomas Doyle, for Plaintiff, Re-direct

Mr. Warner: Your Honor—

The Court: I asked him if he knew. I haven't asked him yet from whom or how.

The Witness: It was discussed among the men.

The Court: In the presence of Mr. Carr?

The Witness: I believe he was there.

The Court: Where was Mr. Green at this time?

The Witness: Probably in the divided other half of the shanty or trailer that was under the boom.

The Court: I acknowledge I am not certain that Hersent was bound by what Carr heard the men saying, but I would like to know what did the men say with regard to the advisability of bringing the barge back in.

The Witness: We had brought the barge in on other occasions.

The Court: I know.

The Witness: We wondered if they were going to take it in on that particular occasion.

(641) The Court: You were just talking about are they going to ask us to bring it in?

The Witness: Yes, because we ordinarily went with the barge.

The Court: Did Carr make any remarks whatsoever about whether or not the barge would be brought in?

The Witness: In other words, did he ask for an opinion?

The Court: Did he talk about it at all any way?

The Witness: Not to my knowledge.

The Court: Did he speak with Green concerning this decision or non-decision, to your knowledge?

The Witness: I do not know.

The Court: That is all.

* * *

Arnold Wildner, for Defendant, Direct

ARNOLD WILDNER, called as a witness by the defense, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Warner:

Q. Captain Wildner, what is your occupation? (642) A. Tug captain.

Q. How long have you been a tug captain? A. Since 1953.

Q. Are you licensed? A. Yes, I am.

Q. Who issues licenses? A. The United States Coast Guard, Department of Commerce.

Q. Have you been a tug captain continuously since the day that you mentioned? A. Just for periodic layoffs.

Q. In December of 1972, you were employed by Hersent Offshore? A. Right.

Q. The defendant in this case? A. Yes.

Q. In what capacity were you employed? What was your job? A. Tug captain on the tug Paumanok, which was attending tug for their work project.

* * *

(644) Q. Captain Wildner, do you recall some time after the capsized boom from the crane was retrieved? A. Yes.

Q. Were you present at the time it was lifted up? A. I believe I was. We were standing offshore.

Q. I want to show you this photograph. A. I believe that is what I saw. I can remember lifting something out of the water with a lot of wires off of it and I assumed that was the boom.

Q. Is that a fair and accurate representation of the boom within a matter of whatever it was, seconds or minutes, after it came out of the water? A. Yes.

Mr. Warner: I offer it in evidence as Defendant's Exhibit X.

Arnold Wildner, for Defendant, Direct

Mr. Coates: No objection.

(Defendant's Exhibit X was received in evidence.)

Q. Captain Wildner, on the particular Friday before the capsized, that is, Friday, the 15th, before you left, were you given any instructions about the next day, (645) and when I say "left," before you retired from the job that day. A. I called Mr. Green, I believe it was, on the radio or had conversation with him, and he told me to come in and stand by Saturday with the tug and my crew.

Q. Did you do that? A. We did.

Q. Did you have any instructions as to what you were supposed to be doing, if anything, while standing by? A. We were keeping an eye on the weather conditions in the inlet. I had myself, on my own, to take a vantage point of getting up on the roadway which overlooked where the barge was laying, to observe it with binoculars to see how the barge was riding with the weather.

Q. When did you do that, that last thing you described?

A. The last observance was between three and four o'clock in the afternoon. I can't recollect that close.

Q. Do you recall what power binoculars you used? A. I had 7 x 35 binoculars.

Q. Can you tell his Honor what you saw when you looked out the last time you viewed the barge? A. I looked at the barge and the barge seemed to be riding in the weather very well. It didn't seem to be (646) doing much, I would say, movement. It was just riding the way the sea was riding by it.

The Court: Which way was the sea coming from at that point?

The Witness: I believe in the latter part of the afternoon it had come around more to the north.

The Court: North to northwest?

The Witness: Yes.

Arnold Wildner, for Defendant, Direct

The Court: How high were the seas in your estimation?

The Witness: From what I could judge from the shore, there were at least 5, 6 foot seas, maybe better.

The Court: What would you estimate the winds to have been? Did you take any wind readings that afternoon?

The Witness: I had an anemometer on the boat and it was gusting up to 35, 40 and on occasion it would go up a little bit higher.

Mr. Coates: Miles per hour or knots?

The Witness: I can't recall—I believe it was read in knots. I think they are calibrated for knots.

Q. When you looked out with the binoculars, did you get a chance to see the boom? A. I could see the boom, but I couldn't tell at a distance like that with a set of binoculars if there (647) was any movement.

Q. You could tell, though, if it was swinging around? A. If it was completely free, you could definitely tell.

Q. Was it? A. No.

Q. You said you were told to stand by. You received these instructions to stand by from— A. Mr. Green.

Q. Bob Green? A. Yes.

Q. Did you receive any instructions from Mr. Green as to what you were to do if there was any difficulty with the barge, I mean in terms of contacting? A. If anything had been wrong with the barge, I definitely would have contacted him or contacted somebody who could get a hold of him through their office.

Q. Did you have any instructions as to what you were to do if the weather broke? A. Probably contact Mr. Green and tell him that the weather had calmed and might have myself taken the tug out. Had it calmed, I wouldn't even have to have him tell me to do it. I would take the tug out ordinarily to get out (648) there and see what it looks like.

Arnold Wildner, for Defendant, Direct

Q. Did you speak with Mr. Green at the end of that day, Saturday? A. I had a telephone conversation with him and I told him I had seen the barge and from my estimation of what I could see, the barge was still in good condition.

Q. To the best of your recollection, earlier that day had you had a conversation with Mr. Green for a status report on the situation, to the best of your recollection? A. I definitely couldn't say I did because it is hazy in my memory. I am pretty sure I may have had a conversation.

Q. You can't say positively? A. No, but I did have a conversation in the evening.

Q. Possibly in the evening and possibly in the afternoon? A. Definitely after I had viewed the barge I had told him the situation, but prior conversation during the day, I don't recall saying Mr. Green, I hadn't taken any trips down, so I couldn't say anything to him, but I do think I did talk to him concerning the weather and what might be.

Q. By the way, as far as conditions went on that (649) day, were you able to get your tug out? A. No.

Q. Would you have been able to get your tug out? A. Coming out of Mattituck Inlet you have a shoal or bar that runs right across before you make your exit out to the bell buoy and there is a 15-foot shoal and with a five or six foot sea, you have an up and down of five or six feet and the tug is 9 foot. Possibly I would come up on one sea and be right down landing right on top of the bar and it wouldn't be very good.

Q. On Saturday, December 16, you came for standby some time in the morning? A. Yes. I believe we were there either 0700—0700.

Q. Can you tell the Court, Captain Wildner, on that day from 0700 up through to the time that you left, did the weather conditions remain the same, get better or get worse? A. Well, for the time we came on the morning, it seemed the wind were increasing during the day all day

Arnold Wildner, for Defendant, Direct

long and there was no abatement in the wind at all by the time we had gone off in the afternoon.

(650) Q. Captain Wildner, you heard that there was some discussion before about crossed mooring lines?

A. Yes.

Q. You remember that the lines, the mooring lines were crossed on the barge 136? A. Correct.

Q. Some of them were crossed? A. Right.

Q. Now, would I be correct in describing the 136 as a construction barge? A. Well, it is a barge with a crane put on it. You would call it a construction barge, right.

Q. Have you in your 23 years experience worked with other barges that have equipment on them and are doing construction work? A. Yes, with dredging and pile driving.

Q. Over the course of the 23 years that you have been working as a tug captain, what percentage of your work has been with barges of this type? A. Well, I work definitely with dredges and I do work with pile drivers, so I would say 90 per cent.

Q. I am not asking you for an opinion, Captain Wildner, about the advisability of crossed line procedures or not, I only want to ask you for your experience in seeing (651) this arrangement.

What has been your experience in working with barges engaged in construction and with dredge barges as to whether they have a practice of crossing mooring lines and leaving them that way overnight, what has been your experience? A. We have always—most—I'd say 95 per cent of the barges that I have never worked with have always rigged up the way this barge is laying right now for pile driving and dredging, and the equipment is laid like that overnight. In fact, I am working with one piece of equipment right now that has the same layout.

Q. Can you explain to his Honor in terms of the position of the piles, the position of the barge and the

Arnold Wildner, for Defendant, Direct

access to the barge of your tug and of the crew boat how the crossed mooring lines would operate in relationship to the barge and the project and the work around it? A. Do you mean if I were to come up alongside with the tugboat or with a barge alongside of it? Well, it does make it a lot safer and it does keep their wires from getting cut because if you bring a barge up alongside with the wire leading right straight off of one corner, your barges are going to ride on that wire and your tug's propeller is going to be right in contact with that wire. (652) Either side you might come on, if they were running the other way.

Q. How about the crew boat and the distance of the barge from the project, what was the relationship between the distance of the barge from the project and the access that the crew boat would have to getting in there? A. Well, the crew boat was not quite as long as we were. And it was more maneuverable because he had twin propellers and he could maneuver in there and just come right in head or.

Q. When you come in with a barge you can't come head on to a piece of equipment, you have to come in sideways and land right alongside of it.

Q. The 136 was putting in piles, is that right? A. Yes.

Q. Would you bring those piles out to the barge? A. Yes, we had a barge that carried piling. I don't know the exact dimensions of it, but whatever the length of the pilings were, the barge was about, I'd say, 15 to maybe 18 foot longer than the pilings were.

Q. Did your work in delivering those pilings to the barge require you to come right up alongside of it? A. We did, we had to put in alongside of the derrick barge.

(653) Q. Captain Wildner, did your tug, the Paumanok, have a weather radio on it? A. We had a weather frequency, correct.

Arnold Wildner, for Defendant, Cross

Q. That was on on a regular basis? A. Yes. They update the forecast every three, four hours, and during the day we would switch over to, I think it is 165—166.55 megahertz, I think it is—and that is an updated every four hours from the New York City Weather Bureau, on your marine forecasts.

Q. Did you have contact with the barge? A. Yes, they had radio communication. They had walkie-talkie sets which were on—not on a marine frequency, I guess it was a low band frequency that they had their own channel on.

Q. Was there a contact between the barge and you? A. Right.

Q. For the conveyance of weather information? A. Well, if I got the weather, I could call and let them know what the weather was out there.

Q. And of course you used it to convey other information as well? A. Right.

Q. Did the crew boat Tracy Miller also use that frequency to talk to the barge? (654) A. Right. We all had the same frequencies and all had the same communications so we could all talk at once to each boat.

Q. And to convey weather information? A. Right.

Q. This was something that was done on a regular basis each day? A. Right, we always kept check on the weather.

Mr. Warner: Nothing further, your Honor.
The Court: Cross examine.

Cross Examination by Mr. Coates:

Q. Mr. Wildner, looking at your log which is in front of you, I notice that the date entries seem to be consistently placed well to the left of the margin, but when we get to December 16, 1972, Saturday, that all seems to be shunted over to the right. Is there any—was there

Arnold Wildner, for Defendant, Cross

any reason for that? A. Not that I can recollect. Not that I recollect why they do it that way, no.

Q. Is that the only one that is done that way? A. It is, as far as I can see here.

Q. Is that your handwriting? A. It is my handwriting.

* * *

(655) Q. You mentioned your first telephone conversation with Mr. Green when—during which he said to come in and stand by, what— (656) A. That would be coming in and standing by, I believe that would be on Friday afternoon, which might not have been a telephone conversation, it might have been done via radio.

Q. In any event, you called him and he didn't call you, is that correct? A. Usually I would check in every day, some time between two and four o'clock in the afternoon to find out what orders would be for the following day, what orders would be for weekends, if they were any.

Q. Did you ever stand by out at Buoy Mike? A. Yes, I did.

Q. On what occasion would you stand by out there? A. Well, we would run a tug out there, if there were no movements, we would stand by out there, we would stand by with a tug boat.

Q. How was Buoy Mike moored at the bottom? A. I believe that is large cement blocks I believe that they had there.

Q. Is that one of those 30-ton blocks? A. That was a Pelican-type hook affair on the top for a trip.

Q. Then you testified that there came a time when you observed the barge on Saturday through binoculars. (657) A. That is correct.

Q. What time of day Saturday was this? A. Some time between three and four o'clock in the afternoon, to my recollection.

Arnold Wildner, for Defendant, Cross

Q. Did you view it through your car window? A. No, I got out the car and took my binocular and viewed it.

Q. Was it raining heavily at that time? A. I don't recall.

Q. This was during a storm, wasn't it? A. The storm, I guess there was rain, but—

Q. How was visibility at that time? A. I could see the barge.

Q. Did you have to keep the lenses dry on your binoculars? A. No, they had an extension out over the lenses.

Q. Do you recall using that? A. And of course, I am not looking directly into the wind.

Q. The radio on which you would get your weather, would that be Station KWO-35 out of New York, frequency 162.55? A. I believe that's it, yes.

Q. Those broadcasts go continuously on a 24-hour (658) basis, is that correct? A. They are on tape and they broadcast about every three or four minutes on tape and they are updated every three or four hours, unless there is an unusual weather disturbance, which they will break in right away and make a new tape on and start retaping again.

Q. To get that you just push a button on your— A. That's correct.

Q. We have in evidence Exhibit 6. A. On your radio, yes.

Q. Which tells you about these continuous weather broadcasts, and it says here, "These VHF-FM radio stations are managed by the National Weather Service. Broadcast tapes are updated every three to six hours and amended as required."

Did you find that to be so? A. Yes, they are very accurate.

Q. On Saturday you said that the conditions might have been too rough at the Mattituck Inlet because of the shoal and the bar there to go out. A. Yes.

Arnold Wildner, for Defendant, Cross

Q. Did you consult your tidetables that day? A. Yes.

Q. When was the tide high that day? (659) A. I couldn't tell you exactly.

Q. Is there anything you have with you which would refresh your recollection? A. No.

Q. You don't recall that? A. No. I would have to go back on one of the tugboats and find an old tide table for that there year.

Q. It takes about six hours to go from low to high, is that correct? A. Approximately yes.

Q. So there would come a time within a six hour period— A. There would be some time you would have a high water.

Q. Suppose it was high water, would it still have been difficult or impossible to go out on Saturday? A. I said before, if you had even a five-foot—I guess the mean tide is five foot at Mattituck, or something like that, if you have a five-foot rise over a five-foot shoal, then you have ten foot, but you have a five foot sea running across there which sort of cuts that there in half, so you only have seven foot at the most.

Q. What is the range of tide in that part of the Sound? (660) A. I believe it is five foot, I believe.

Q. What did your tug draw? A. Nine foot.

Q. At low tide on a calm day, what would be the depth over that bar? A. At low tide?

Q. At low tide on a calm day. A. You would have nine foot of water on top of the shoal at low water.

Q. Five foot. And so at high tide you would have about ten feet, is that correct? A. Approximately, yes.

The Court: You required high tide to get out of there even without weather?

The Witness: Most of the time we did have to go in on a high tide. But—

Q. How much clearance did you have from the bottom at high tide, normally? A. I never sounded going across.

Arnold Wildner, for Defendant, Cross

I took what the chart said that there was five feet. Maybe there might have been a foot more. That bar shifts. There is times when the bar might be—

The Court: Were there ever occasions when you scraped bottom going in or out?

(661) The Witness: I did.

Mr. Warner: I don't believe this map can be used for that purpose. As your Honor pointed out—especially with this degree of distance that we are talking about, probably that is an area that might tend to change from map to map. I don't know, actually.

The Court: I think a sand bar, particularly—

The Witness: I have it noted in the log book that I did hit the bottom about two weeks before that, when it was rough weather, but it wasn't comparative to what this here storm was.

The Court: Do you know what the tide was at that time?

The Witness: I assume that it was fairly high water or else I wouldn't have gone out.

The Court: They never dredged that harbor to make it—

The Witness: They have. But the amount of current that flows out of the Mattituck Creek there brings the sand down, and it forms because there is—the way the tide runs on Long Island Sound it sweeps right toward the Mattituck Inlet and carries everything.

Q. Let's go back from Saturday to Friday, Captain Wildner. (662) A. Yes.

Q. Let's assume that the wind was out of the east on Friday, let's say the middle—let's say at the time, some time before—let's say about two, two-thirty in the afternoon and your log indicates that the weather forecast was gale warnings.

Arnold Wildner, for Defendant, Cross

Do you recall which way the wind was blowing from at about that time on Friday? A. What date is that?

Q. This is Friday, the 15th. A. Right. No, I don't recall what way the wind was blowing. But I heard testimony before that it was out of the east. Easterly wind right at the shoal over there, the shore makes up and goes out, I think it is Point Misery, I believe, and east doesn't bother too much coming across the shoal. The land hooks up around there.

Q. With the wind out of the east on Friday about 1430 in the afternoon, would Mattituck Inlet be somewhat under the lee of the land? A. The inlet would be—

Q. Assuming the wind from the east, it would have to come across land before it even reaches you, is that right? A. Yes, it would come partly across there.

(663) Q. I am talking about from the east, in other words, it would be going 270. A. This is 270 right here.

Q. I am talking about true.

The Court: We were told that the winds were from the east on the 16th, not the 15th.

Mr. Coates: I am talking about the 15th.

The Court: Why? What is the interest in the 15th?

Mr. Coates: Friday morning the crew was brought in, this is the 15th, early in the morning, and gale warnings were forecast. I would like to show that it was very feasible for him to have gone out Friday to—

The Court: He hasn't said he couldn't go out Friday to bring the barge in. It was Saturday he said he couldn't go out and bring the barge in.

A. When they give you forecasts where your wind is coming from, they don't give it in true, they give it in magnetic. So you have got 12 degrees or something like that off here on a line you are figuring on.

Q. Are you certain they give it magnetic? A. Yes.

Arnold Wildner, for Defendant, Cross

Q. I do understand that Friday afternoon you would have had no trouble going out. (664) A. I probably could have made it over.

Q. After three o'clock in the afternoon on Saturday, who was aboard the tug, if anyone? A. Pardon me?

Q. After three o'clock on Saturday, 3:00 P. M., Saturday, who was aboard the tug, if anyone? A. No, that was our normal time to leave the boat and we weren't told to work any overtime or stand by any further during the day, just to work the normal hours.

Q. So on Saturday, from that point on then, to Sunday, there was no one aboard the tug, is that right? A. No, sir.

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(665) Q. What was the length of your tug? A. I think that the boat was 62 or 68 foot long. I'd have to pull the papers on it or call up Gates to give you the papers on it. But no longer than 68 foot long.

Q. The barge, I will ask you to assume, was 135 feet, is that right? A. No. The 135 foot barge was the work barge. Now, whatever the length and diameter was of the barges that were carrying the pipe, I don't know the exact length of the Hughes barge.

Q. I am asking you to assume that the Hughes barge was 135 feet long. Do you disagree with that? It has been established.

The Court: What he was doing was adding the (666) length of the barge he has been towing to his own length to estimate the relative size of the tug and the barge to the barge it was approaching. I think that is what he was doing.

The Witness: No, see, when you have your tug alongside of a barge, you are not made up where the stern of your tug is completely flush with the back of the barge. You are extending back maybe, say, 15 feet or something like that, for your maneuverability.

Arnold Wildner, for Defendant, Cross

Q. Suppose you weren't coming alongside to tow, but coming alongside to put someone aboard, assuming the wind was from the east, you could have—which would have been the lee side of the barge as it was moored on Friday, December 15. A. You would have to come around and come down from the western part of the Sound and head up into the east, you always head up into your weather if you possibly can, or into the current.

Q. The barge being 135 feet long, and ours being—how long? A. I think it is 62 to 68 feet.

Q. Could you have found a pretty secure lee, so to speak, on the west side of the barge? A. I probably could have gotten my tug, sure.

(667) Q. You said the crew boat had two propellers, is that correct? A. Twin screw.

Q. You could have done the same thing with the crew boat on Friday afternoon, is that correct, come up on the lee side of the barge? A. Yes.

Q. And with twin screws, if you go ahead on the starboard one and back on the port one, can't you kind of walk the stern in? A. You can turn your boat maneuverable sideways, come around much faster than you do with a straight propeller.

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(668) The Court: Were you out there on the 14th?

The Witness: Yes.

The Court: What time?

The Witness: We left the dock at 7:20 in the morning and arrived at 0830 alongside KMS 136.

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(669) The Court: As of when you left the barge, (670) was it in its forward position up against the working site or had they winched it back away from the construction?

The Witness: No, it's normal for them, when—well, I don't know—by the time I left in the afternoon whether they were finished and completed work or not I don't

Arnold Wildner, for Defendant, Cross

recall whether they were or not. But they usually, when they finished the day they would move the barge back.

The Court: They would move it back in this position where the lines closest to shore were both short, taut and crossed, correct?

The Witness: Well, I wouldn't say how taut—they were crossed.

The Court: We are told that on the last mooring their distance was a hundred on one line and a hundred and fifty on the other and that they were taken up rather taut.

Now, you have explained the advantages of doing this when a barge is working constructions.

The Witness: Yes.

The Court: Can you see any dangers in doing this when you have ceased working construction and are battening down the vessel to undergo a storm?

The Witness: No. We have ridden quite a few (671) storms in the Long Island Sound with the barge I am working on now for the past two months with the wires the same and haven't had any problem.

The Court: When you secure and moor in this manner, you prevent the vessel from turning itself into the wind, do you not?

The Witness: That is correct.

The Court: That means you are going to take the seas broadside if the wind comes from east to west?

The Witness: East to west, that's right.

The Court: In fact, if it comes from the northeast or the northwest you are getting quartering waves which will come over the barge, also, is that correct?

The Witness: Yes.

The Court: If there are any leaks in the hatch covers or other aspects of the top surface of the barge she is going to take on water, will she not?

The Witness: Yes, sir.

The Court: Consequently, isn't it more desirable to slack off the mooring lines so she will turn in the wind

Arnold Wildner, for Defendant, Cross

keeping herself fore and aft with the winds and not taking water from over the beam?

The Witness: That's true. But let me— (672) they do, sir, take into consideration sometimes what the range forecast on the wind is going to be, and if the wind isn't going to blow for too long, they would quarter it. But there is no definite way by quartering it that your wind won't shift to another direction.

The Court: You ceased your operations on Friday afternoon when the winds were blowing 40 miles or higher?

The Witness: Yes.

The Court: What was the forecast at that time with respect to continued winds and seas?

The Witness: The winds were supposed to stay out of the northwest and continue on through the night. I don't recall whether they said they were going to subside. I think that's what the forecast was.

The Court: You knew there was going to be another 12 hours of fairly strong northwest winds, gale force?

The Witness: That would be the assumption.

The Court: If you had had to make a decision as to how to handle those mooring lines at that time, and assuming you could have gotten out to the vessel, what if anything would you have done with the mooring lines?

Mr. Warner: Your Honor, unfortunately, I mean, for the third time, I have come to a position of (673) having to object.

The Court: That is all right.

I don't mind your objecting. I am overruling it.

Mr. Warner: Your Honor—

The Court: He is an expert in the field of ship handling. He is a master of tugs. He works construction barges 90 percent of the time. He has been at sea for years. He knows what wind and

Arnold Wildner, for Defendant, Cross

water can do. I think he is sufficiently expert to express an opinion on this matter.

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(674) The Court: That is not dramatically different from the way I phrased it to him. It says during the night. That is anywhere from, say, six to 12 hours of conditions as I described them.

Assuming you had been out on the barge for one reason or another, assume you are the only person out there, and you have to make the decision as to what to do with the lines, and you know what the weather is like then and you know what the prediction is for the next six to twelve hours, would you have left the lines in that condition or would you have slacked them off?

(675) The Witness: No, I think I would have left them in that condition, your Honor.

The way the barge is riding, it is north and south.

The Court: The winds at this point were from the northwest and possibly west.

The Witness: It would be quartering off a corner of the barge. You wouldn't be getting it directly on the side.

The Court: The weather forecast was for northwest and that would have been directly off the side of the barge?

Mr. Warner: West to northwest, your Honor.

The Court: All right.

Not for six to twelve hours.

The Witness: When you are only talking 15 to 25 mile an hour winds—

The Court: We are talking 40 with gusts to 55.

The Witness: Well, there would have been a question about quartering it around.

The Court: You would have given some thought to letting it drift a bit to swing in the wind?

Arnold Wildner, for Defendant, Cross

The Witness: First of all to let it drift and let your wire slack. The wire on the northwest end would (676) have been rubbing against pilings—

The Court: You could have slacked the rear lines off—I think you are right, if you had slacked the rear lines off it would have rubbed against the pilings.

The Witness: You would have had chaffing on the wire or pilings.

The Court: Whose decision was it to put down that mooring between the pilings so that the line ran directly between them?

The Witness: I don't have no idea, your Honor.

The Court: It wasn't you, was it?

The Witness: No, sir.

The Court: One of the purposes, if not the major purpose of your standing by on Saturday, was to be able to go to the assistance of the barge in case it showed it was having trouble, is that correct?

The Witness: True.

The Court: Now, when you last spoke with Mr. Green on Saturday night, was there any discussion as to whether you should stand by on Sunday, considering the weather conditions then existing?

The Witness: No, we didn't have any conversation at all about that.

(677) The Court: Not one way or the other.

The Witness: No, sir.

The Court: I take it you normally stood by on Saturdays even without bad weather, is that so?

The Witness: No, I don't recollect whether—the job was only working five days a week. Only for an exceptional—if they wanted to get any extra work done would they have a crew work on a Saturday.

The Court: You were there on that Saturday because of weather conditions?

Arnold Wildner, for Defendant, Cross

The Witness: That is right.

The Court: Who made the decision not to have you there on Sunday, if a decision was made?

Mr. Warner: Your Honor, may I ask one question before that?

The Court: All right.

Mr. Warner: Captain Wildner, did Mr. Green have your telephone number?

The Witness: If Mr. Green didn't have it, Mr. Miller had it and Mr. Green had contact with Mr. Miller.

Mr. Warner: So to the best—

The Witness: My telephone was accessible to him.

(678) Mr. Warner: So to the best of your knowledge then, Mr. Green could have contacted you on Sunday?

The Witness: That is right, any time, I mean—

The Court: Normally when he wanted you to work the following day he told you so the preceding night, right?

The Witness: That is right.

The Court: On Friday he told you he wanted the barge—the tug standing by on Saturday, but on Saturday night when the weather, if anything was worse than Friday night, he didn't say anything about standing by on Sunday, is that correct?

The Witness: Yes, sir.

The Court: He didn't discuss it with you one way or another?

The Witness: No, sir, not to my recollection.

The Court: You told him you thought the barge was riding fairly well, it didn't appear in any trouble, and he said fine, or something to that effect?

The Witness: I don't know about that, what the gist of the conversation was.

The Court: Continue, Mr. Coates.

Arnold Wildner, for Defendant, Cross

By Mr. Coates:

Q. Was anyone standing by aboard the tug Friday night?
(679) A. No, sir.

Q. According to your log, a gale warning had been issued some time prior to 1430 on Friday.

You have also told us that when the gale actually did develop it was impossible, you thought, or at least you couldn't bring your tug safely out of Mattituck, is that correct, when the gale did develop? A. Yes.

Q. Knowing that a gale was coming, and—the entry indicates you knew it was coming, couldn't you have berthed over at Port Jefferson or over at New Haven Friday night?

A. We don't—during the whole job, our tie up was in Mattituck and there was never any discussion of securing the vessel in any other port or any other harbor.

Q. I mean—you had on prior occasions berthed overnight at Port Jefferson, hadn't you? A. Not myself.

Q. But the tug had? A. Right.

Q. According to the log? A. Yes. I believe what—I read part of the log entries to the previous captain, and I think they were towing a barge up Long Island Sound and they did (680) have—encounter weather and because of the weather conditions they pulled into either Port Jefferson or New Bridgeport, Connecticut. That was because of the weather conditions, the tug couldn't go any further.

The Court: Even if you could have gotten out of Mattituck Harbor on Saturday, you had not given any thought to going out and bring that barge in, had you?

The Witness: I myself, not unless I was, you know—

The Court: Instructed to?

The Witness: —instructed to.

The Court: And you have had any discussions with Mr. Green in which the subject was even broached, did you?

The Witness: No, sir.

Arnold Wildner, for Defendant, Cross

The Court: So the sand bar problem and the sea problem was not responsible for the lack of an effort to bring the barge in, it was the fact that Mr. Green never told you to try and bring it in?

The Witness: No, he never said "We have to get this barge in."

The Court: You wouldn't have attempted to have brought it in without his instructions, would you?

The Witness: No, sir.

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(681) The Court: Did you and Mr. Green have any discussion about the sand bar and the difficulties of (682) getting the—

The Witness: He knew the problem that the boat had because there was problems before going in and out of there because we could only go out when it was almost tip top high water with equipment and bring it back in. I was stuck in the inlet there two or three times.

The Court: If he knew if the weather was bad you couldn't get out of Mattituck Harbor, what purpose were you possibly serving by standing by on Saturday?

The Witness: I just assumed that if the weather did calm out—

The Court: If it calmed out you wouldn't have to take the barge in, would you?

The Witness: No, but I could phone Mr. Green and tell him and they might have got a crew together so we could take them out to inspect if there was any damage done.

Mr. Warner: Also, your Honor, Captain Wildner did testify that it was his instructions to notify Mr. Green if there was a break in the weather.

The Court: I understand that. But he didn't say what he was going to do if there was a break in the weather.

Arnold Wildner, for Defendant, Cross

Mr. Warner: Because I believe it was up to (683) Mr. Green, who may have withheld any discussion on it because he understood the various factors involved and would simply convey his message at the time that it was relevant.

The Court: Where did Mr. Green at that time? Where was he when you were telephoning him?

The Witness: I don't know his home.

The Court: Was it in the county? How far away was it?

The Witness: They could probably tell you. I don't know exactly.

The Court: Can you remember what area code you dialed when you spoke to him?

The Witness: No. I had an address book which I had. I don't have it any more.

Mr. Coates: Your Honor, there is an additional point. Not only was the tug supposed to be available perhaps to bring the barge in, but also to render assistance out there if weather deteriorated and the need arose, such as pumping or whatever.

The Court: I know. He said if the weather deteriorates he can't get out.

Mr. Coates: But Saybrook, New Haven and Port Jefferson were available to him?

The Court: But they were in Mattituck, they (684) weren't there.

Mr. Coates: That is right.

The Court: I assume that the crew boat which drew less draft could have cleared the bar without any trouble?

The Witness: She could go over it at all times.

Arnold Wildner, for Defendant, Cross

The Court: Was the crew boat as able to take seas as the tug, or were they about equal, or what?

The Witness: I'd say they were equal, but she is a lot more buoyant than we were, we are a lot heavier in the water, and when we—

The Court: Would it have been feasible to have moored the tug to that tanker buoy that was out there and to have brought your crew in by the crew boat the previous night so that the tug would have been more accessible had you wanted to use it on Saturday?

The Witness: I would never leave the boat out there by itself on a mooring, not on—not unless there was a standby crew on the tug.

(685) The Witness: You wouldn't leave it out there unmanned?

The Witness: No, sir.

The Court: Does it have sleeping?

The Witness: We do.

The Court: You could have left it out there manned?

The Witness: We could have.

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(686) Q. The winds had previously been from the east?
A. You would have a swell running.

Q. With the north fork going up to the northeast and the winds from the east? A. The wind comes from the east and carries it out from the ocean more or less down through the Sound and you get quite a swell rolling.

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(688) Q. Captain Wildner, in order to disconnect the (689) barge, so it could be towed away, would it be necessary to have someone on the barge to make this unmooring? A. It would.

Q. It would be necessary? A. Yes.

Q. So that if you didn't get somebody on the barge to do that work, you couldn't, if you were out there on a tug, tow it away? A. No.

Arnold Wildner, for Defendant, Cross

Q. I would like to ask you to make a number of assumptions and then I will ask for your opinion.

I want you first, Captain Wildner, assume the history of the barge as you knew it. In other words, you were there more or less from the beginning of the job at the site up until the time of the caps. e. I want you to assume the history of the barge at that site through the various weather conditions that you saw it go through.

Secondly, I want you to assume that the barge remained moored in the manner that it was moored on the 15th, which as you heard, was found in a capsized position about approximately northwest, southeast and in general was either in that position when it was right side up or perhaps more north south. It is a variable kind of situation.

(690) Third, I want you to assume and consider the interest in avoiding danger to life and to property with collision with the dock and interest in avoiding danger to life as of paramount consideration. A. Yes.

Q. Fourth, I want you to assume weather conditions on Friday at the 5 o'clock forecast which were, without reading them all—

Mr. Coates: He is asking him to assume conditions from a forecast.

Mr. Warner: I am sorry.

Q. Assume the forecast is a condition. At 5 o'clock on Friday which was gale warnings remain in effect for easterly winds 30 to 40 knots with higher gusts tonight, then northerly 20 to 30 knots Saturday. I also want you to assume for the next day, Saturday the 5 p.m. forecast, that there were gale warnings in effect for west and northwest winds 30 to 45 knots with stronger gusts of 55 knots or more at times gradually diminishing later tonight and running 15 to 30 knots with higher gusts Sunday.

• • •

Arnold Wildner, for Defendant, Cross

(691) I ask you to assume for Saturday that the barge was as you saw it.

In other words, it had withstood Friday and it had withstood as much as Saturday as preceded your last viewing with the binoculars, including among other things the fact you did not see the boom swinging and that you saw the barge riding as well.

I ask you to assume all those facts in your mind, in your thoughts and I ask you based upon all of those assumptions and the 23 years of experience that you have had, I ask you whether in your opinion, without telling us what you would have done yourself, I am just asking you whether in your opinion it was reasonable, in light of all those things, for Mr. Green to have left the barge in the circumstances that it was in for the latter part of Friday and also for Saturday? A. I believe I would because he had long leads on his wires which the winds supposedly if they shifted around to the northwest they would be on the bow of the barge and with the new wires and length of the wire, I don't believe the barge would have broke its moorings and she had laid in quite a bit of weather before and didn't seem to be having (692) any problem with it, I think I would have left it the way it was.

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(693) Q. Let's assume the small craft—assume that the forecast is this: Small craft warnings change to gale warnings at 11:00 A.M., northeast to east, increasing to 30 to 40 knots with higher gusts later this afternoon and tonight.

Would it have been prudent to have left the barge moored as it was in light of this particular forecast?

Mr. Warner: What time, your Honor?

The Court: 11:00 A.M., December 15.

A. On the assumption you would have had a crew on the barge and a tugboat could have got out.

Arnold Wildner, for Defendant, Re-re-direct

Q. This is Friday. A. You already said the crew had got off. They got off before they got that forecast.

Q. I am assuming the tug could come back. Would it have been prudent to send the tug back to either move the barge to a place of safety or to change the mooring arrangement, in light of this forecast? A. Probably, but the other probability is, you wouldn't have gotten men on the barge and you could have lost a life or a leg trying to put somebody on.

Q. This is Friday morning and the gauger, I think at 7:30 in the morning said it was 10 knots from the east.

The Court: Let's forget what he said.

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(694) *Re-re-direct Examination by Mr. Warner:*

Q. Captain, based upon what you have heard this morning—I am sorry—this afternoon, from Mr. Doyle, about the sea that came over him and based on what you heard from the men when they came back at 9:45 and considering the fact that that was an hour and a quarter before 11:00 o'clock, and that conditions got worse, do you think it (695) would have been prudent to go out there and try to put somebody on board that barge? A. I don't think it would have been safe.

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Deposition of John Mayer, July 30, 1973.

(3) Examination by Mr. Hanan:

Q. May I have your full name and address, please? A. John Mayer, 85 Jo Line Road, Jefferson Station, New York.

* * *

Q. By whom were you employed in December of 1972? A. Hersent.

Q. In what capacity were you employed by Hersent in December of 1972? A. Crewboat operator.

Q. What was the name of the crewboat? A. Tracy Miller.

Q. Would you describe that boat for us briefly? A. A fifty-foot long crewboat, twin screw.

Q. What was the boat used for in December of 1972? A. To transport the crew from the dock to the (4) construction site.

Q. Did it perform any other functions other than that? A. At times it did, yes.

Q. What were those? A. Towing and moving anchors.

Q. What would you take? A. Well, shifting barges, some of the small barges we had.

Q. What size barge would you shift with the Tracy Miller? A. Only the small ones, eighty or a hundred foot long.

Q. How wide would they be, approximately? A. Forty foot, thirty-five foot.

Q. Wood or steel? A. Steel.

Q. Were they deck scows? A. Yes.

Q. Any equipment located on their decks? A. No, sir.

Q. What is the horsepower of the Tracy Miller? A. I would have to check. Approximately six hundred horsepower.

(5) Q. What's the maximum RPM's it would turn ahead? A. 2100.

Deposition of John Mayer, July 30, 1973

Q. What was the maximum speed, assuming calm water?
A. We had figured her for about seventeen knots.

Q. How long had you been the master of the Tracy Miller prior to December 18, 1972? A. I was on the boat since April of '72.

Q. Was there anyone else who was assigned as permanent crew to that vessel? A. Two other fellows.

Q. What are their names? A. Charles Guarnier. Fred Griffith.

Q. What were the hours that you were employed on a regular basis on that boat, if there were any on a regular basis? A. Regular daytime hours, eight or ten hour day, all daylight.

Q. What's the usual time you began working in the day?
A. Either 6:00 or 7:00 o'clock in the morning.

Q. Would you work an average eight-hour day or would it depend upon what you were doing? A. It all depended upon what we were doing.

Q. Some days you quit earlier and some days you (6) work longer? A. Right.

Q. Were those gentlemen, the names you just mentioned, the regular crew? A. Yes, sir.

Q. Any other regular crew members? A. No, sir.

Q. Were they the crew members during the week preceding December 18, 1972? A. Yes, sir.

Q. Do you have a special note book that you keep as a log or for the purpose of recording events while on the job on the Tracy Miller? A. Yes, sir.

Q. Is that the spiral notebook you have produced? A. Yes, sir.

Mr. Hanan: Could we have that marked for identification, please?

(Notebook marked as Plaintiff's Exhibit A for identification as of this date.)

* * *

Deposition of John Mayer, July 30, 1973

(7) Q. I would like to refer you to the log book, specifically the date 12/14/72.

Is that made in your handwriting, those notes? A. Yes, sir, it is.

Q. Then we flip to the 15th, the next date is the 15th. Is that made in your handwriting? A. Yes, sir.

Q. Does that relate the times there you commenced operations on that date? A. Yes, sir.

Q. I believe it says 0600 hours; is that correct? A. That's right, crew on the boat.

Q. Then I see that there is an entry at 9:45. A. Yes, 9:45.

Q. It says, "Left barge with crew." (8) A. That's right.

* * *

Q. Was there a reason you left at 9:45 on the 15th? A. Yes, I asked Mr. Green to please let us get out of here because the sea conditions were getting rough.

Q. You say, "East 20-30, S6 foot, 8 foot. A. Yes, sir. It's eastwind twenty to thirty miles an hour and seas were six to eight foot high.

Q. You asked Mr. Green if you could get out of there; is that correct? A. Yes.

Q. Was there a reason why you should get out of there?

Mr. Reidy: Did you express a reason. If not, don't answer it.

Q. Did you express a reason? A. Yes, sir. To get the crew off the barge before we couldn't.

Q. Before you couldn't? A. Couldn't get them off the barge because of the sea conditions.

* * *

(11) Q. Were you able to take the crew off the barge on the 15th of December? A. Yes, sir.

Deposition of John Mayer, July 30, 1973

Q. Did you return to the barge at any time on the 15th of December? A. Not after that particular time.

Q. Did you make an attempt to return to the barge?
A. No, sir.

* * *

(12) Q. Let me ask you this: Was the tug, Paumanok, there on a regular basis during December? A. Yes, sir.

Q. When it was not in operation where would it hang up? A. In Mattituck Creek.

Q. When it was on the scene in the immediate vicinity of the Barge #136, was there a specific spot it used to moor at while awaiting orders or requests to perform certain functions? A. Yes, sir, more or less it was always in one certain spot.

Q. What was that spot? A. It was hanging on a mooring barrel.

Q. How far was that mooring barrel from the (13) Barge #136? A. I would have to guess five or—

Mr. Reidy: Don't guess. If you don't have it clear, approximate.

A. About five hundred feet.

Mr. Reidy: Is that a guess?

The Witness: Yes.

Q. That's based upon your experience as captain of the crewboat Tracy Miller? A. Yes.

* * *

(14) Q. Do you remember what day of the week December 15 was? A. Yes, sir, it was a Friday.

Q. I notice there is no note for December 16th. A. That's right.

Q. Is that correct? A. Yes.

Deposition of John Mayer, July 30, 1973

Q. You did not work regularly on Saturday; is that correct? A. We did if we were told to come in.

Q. Only on special occasions. A. If we were ordered in, we came in.

* * *

(17) Q. Getting back to the tug, Paumanok to the best of your recollection, do you recall seeing the tug, Paumanok, hanging on the mooring buoy which you have previously described on 0945 on 12/15/72? A. No, sir.

Q. Do you know of your own knowledge whether it was or was not there? A. Yes, sir.

Q. Was it there? A. No, sir.

Q. Where was it? A. In Mattituck.

Q. In the harbor? A. Yes, sir.

Q. Did you see it in Mattituck Harbor? A. Yes, sir.

Q. What was occurring with respect to the vessel, if anything, in Mattituck Harbor? (18) A. When I saw it?

Q. Yes. A. It was standing by, as far as I knew.

Q. Where was she standing by? A. In Mattituck Creek.

Q. Was she tied to the pier? A. Yes, sir.

Q. Was there anybody on board? A. Yes, sir.

Q. Who was on board? A. Pee Wee, or the captain and his group.

Q. Do you know the names of the captain and any of the crew members? A. I believe so. It's Arnold Wildner, John Tiscornia, George Dyott.

Q. Anyone else? A. No, sir, that's all.

* * *

(19) Q. Can you recollect, as best as you are able, what you did when you came to work on the 18th? (20) A. We were on the boat at 6:00 o'clock in the morning and we started things up and then we went to Peterson's Dock. We were there at 0700.

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Q. Could you give me, as best you are able, a description of the dock at which the Tracy Miller was moored each evening? A. Yes, sir. It was tied alongside a barge which was alongside of a dock.

Q. Where is that located? A. On Mattituck Creek.

Q. Was the tug, Paumanok, moored in it, nearby? A. Yes, sir, close by.

Q. How far, to the best of your recollection? A. Within a quarter of a mile.

Q. Then you went to "Pete's" dock; is that correct? A. Yes, that's Peterson's dock.

Q. Where is Peterson's dock? A. That's about a quarter mile north on Mattituck Creek.

Q. Is that towards the Sound or away from the Sound? A. Towards the Sound.

Q. Distancewise, how many miles or nautical miles would it be from the barge to which you were moored to (21) the location of the Barge #136? A. About four-and-a-half miles.

Q. How long would it take you under the best of conditions to make that trip? A. Twenty minutes.

Q. Now, you say "At Pete's," you say "Bob and Frank."

What is that a reference to? A. Mr. Green and Frank Carr got on the boat.

Q. Where did you go from there? A. From there we went to the job site.

Q. What did you do when you got to the job site. What did you see, first of all? A. We seen the barge upside down.

Q. Had anyone advised you prior to leaving Pete's dock that the barge had capsized? A. Yes, Mr. Green.

Q. What did he tell you at that time? A. That some-time previous that the barge had turned over.

Q. Did he say what day it had turned over? A. I think so.

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Q. What's your present recollection of what he said?

(22) A. Sunday morning.

Q. What did you do when you got out to the barge?

A. We rode around it and took a few pictures and came back.

Q. Let's go back a step.

Right under it says, "Back at Pete's, 0830;" is that correct? A. Yes, sir.

Q. That's the hour you returned to Pete's? A. Yes.

Q. Peterson? A. Yes.

Q. Now you have, "NW15 S 3 foot."

What is that reference to? A. Wind northwest fifteen miles an hour, seas three foot high.

Q. Did you do anything other than ride around in the area and take pictures? A. No, sir.

Q. What did you do after you got back to Peterson's Dock? A. Stand by.

Q. For how long did you stand by Peterson's Dock? A. Until 1430.

(23) Q. What did you do at 1430? A. We proceeded out to Mattituck Creek.

Q. Where did you go in Mattituck Creek? A. We went out the Inlet, turned around and came back.

Q. Where were you going when you commenced your voyage out of Mattituck Inlet? A. To the job site, to where the barge was.

Q. Did you make your decision to turn back? A. Yes, sir.

Q. What was the basis for your decision? A. Sea conditions.

Q. What were the sea conditions? A. They were better than six foot.

Q. Is that the entry, "SW20."? A. West-southwest twenty miles an hour.

Q. That refers to wind? A. Yes.

Q. And the sea is six foot? A. Yes, sir.

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Q. That means, sea six foot? A. Yes, sir.

Q. And you were back at— A. 1450.

* * *

(24) Q. In your logbook, which is the official book, I assume, and has been marked Plaintiff's Exhibit B, you make a notation, "I left barge with crew, Winds East 20-30, Sea 6, 8, very hard getting crew off barge."

Would you describe what occurred at the time you were taking the crew off the barge? A. I was trying to get the boat alongside to get the men off.

Like it says, it was very hard between the barge movement and the boat movement.

Q. How was the barge moored? A. How do you mean? It was on anchors.

(25) Q. Do you know whether it was anchored at each corner or midship? Where were the anchor lines affixed to the barge? A. Four corners, each corner of the barge.

Q. To the best of your recollection, what was the general compass direction in which the barge lay fore and aft? A. About, due north and south.

Q. In which direction did the boom of the crane face, towards the bow or the stern? A. Well, the boom faced toward the stern.

Q. And the stern was facing toward the shore or away from the shore? A. Towards the shore.

Q. How long were the cables which went from the corners of the barge to the—is it mooring buoy—is that where they went to? A. Some did, yes.

Q. Where did the others go? A. To an anchor.

Q. Which one went to the anchor? A. The northeast corner.

Q. Went directly to an anchor? A. Yes, sir.

(26) Q. Then the northwest corner went to a buoy; is that correct? A. Yes, sir.

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Q. Did these lines go directly to the buoy or were they crossed? A. Under the north end, the buoy end, they went directly to it.

Q. Then on the stern end they went to—each of the lines of the stern corners went to a straight buoy; is that correct? A. Yes, sir.

Q. How were those lines arranged? A. They were crossed.

Q. Were they merely twisted? A. No, just one line on top of the other.

Q. Did you assist with the mooring of the barge in that position prior to December 15, 1972? A. Yes, sir.

Q. Who assisted you in the mooring of the barge? A. Do you mean—

Q. Any other vessels? A. The tug, Paumanok.

Q. When was the barge placed in the position it was in at the time you departed about 9:45 on December (27) 15, 1972? A. The day before.

Q. What time on the day before? A. Well, I would say the mid-part of the afternoon. I have to look at the log to get that.

Q. Go ahead. A. We started to move the barge at 1530 and finished it at 1645.

Q. Would you describe the weather conditions at the time you finished moving the barge on December 14, 1972, if you can? A. Flat, calm.

* * *

Q. The crew that you shuttled back and forth, (28) could you describe that crew for me?

What do they do in general terms and where do they work? A. The dock builders and the engineers, the operating engineers. The dock builders work on deck and the engineers, they operate the equipment. That was on the barge.

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Q. How many men were on that crew, to the best of your recollection on the 14th? A. Approximately eighteen.

Q. Frank Carr was the dock builder's foreman; is that correct? A. Yes, sir.

Q. What did you do after you completed the mooring of the boat on the 14th of December at about 1645 hours? A. You mean the mooring of the barge?

Q. Excuse me, yes. A. I layed alongside until they were ready to get on the boat.

Q. What activities, if any, were going on on the barge during the time between the period that you finished moving it and the time the crew came on board for you to take them back to shore? A. The normal everyday duties of putting tools (29) away and tying down a boom and—

Q. You said tie down the boom. What do you mean, tie down the boom? A. I shouldn't have said tied down. They layed down the boom in the crotch.

Q. Describe the crotch for me. A. It was upright on the stern end of the barge, approximately fifteen feet high by maybe six wide.

Q. The boom would be lowered down into that crotch; is that correct? A. Yes.

Q. What was the tip of the crotch like; the area in which the boom actually lay? A. It was wood over steel for a cushion, then it had two uprights on each side.

Q. Approximately how high were these uprights? A. I would have to guess at it. I don't know.

Q. Your best estimate. A. Six inches to a foot.

Q. What was done with the block, if anything, when the boom was lowered? A. It was placed into—you call it a cage or cradle that was on the stern of the barge.

Q. Is the cage or cradle more or less a box-like (30) container which it was lowered into? A. That's right.

Q. To your knowledge, was anything done to strap the block into that box? A. No, sir, not that I know of.

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Q. Did you ever see them strap it into the box? A. No, sir.

Q. How far beyond the center of the Barge #136 did the boom extend? A. I don't know.

Q. Well, was it more than a foot? A. Oh, yes, sir.

Q. Was it more than five foot? A. Yes, sir.

Q. More than fifty foot? A. Approximately fifty, maybe a little bit more.

Q. Sometime prior to the 14th, the boom had been extended; is that correct? A. Yes, sir.

* * *

(31) Q. At any time prior to the 15th of December, 1972, did you ever observe anybody pumping out the internal areas of the Barge #136? A. Yes, sir.

Q. When was the last time prior to December 15th that you observed that? A. I don't know.

Q. Could it have been on the 14th? A. No, sir.

Q. Could it have been on the 13th? (32) A. No, sir.

Q. No, or you don't recall? A. No.

* * *

(34) Q. Who was the immediate supervisor of Mr. Frank Carr? A. Mr. Green.

Q. Where did Mr. Green have an office in that vicinity? A. Hersent had an office.

Q. Where was that? A. In Northville Industries' building.

Q. On a daily basis, where would Mr. Green's activities require his presence? A. Out on the Barge #136.

Q. To the best of your recollection, was he on board the Barge #136 on December 15, 1972? (35) A. Friday, the 15th?

Q. Yes. A. Yes, he was.

* * *

Deposition of John Mayer, July 30, 1973

Q. Now, on the 15th, was the entire crew removed from the #136 at 9:45? A. Yes, sir.

Q. There was nobody left on board. A. No, sir.

Q. On the 15th of December, 1972, at any time prior to the crew departing the vessel, did you see them secure the boom crane with cables or guys of any sort? A. Not that I recall.

Q. Had you ever seen them do that prior to departing the vessel? A. Yes, sir.

Q. When was the last time you had seen them do that prior to the 15th? A. I don't know.

Q. But sometime prior you had seen them. A. Yes, sir.

Q. Could you describe just what was done and what (36) you observed? A. Well, they would take cables and tie it to the block and then put one cable from each corner of the barge—

Q. Take a strain on the cables? A. Yes, sir.

Q. And that would hold the boom to the deck; is that correct? A. Yes.

Q. That was not done on Saturday, was it? A. It wasn't being done at that time because of the extension in the boom.

* * *

(37) Q. What did you do after you departed the area on the 15th of December, 1972, this is at completion of your work on that day? A. I went home.

Q. Did you receive any communications from anyone connected with Hersent from that time and the time you arrived back at work on the 18th? A. No, sir.

Q. Did they have your telephone number? A. Yes, sir.

Q. Were there occasions prior to December 15th when they would call you and make requests of you to appear at the time other than that which you had expected to report to work? A. Yes, sir.

* * *

Deposition of Robert J. Green, July 30, 1973.

(3) Examination by Mr. Hanan:

Q. May I have your full name and address, please?

A. Robert J. Green, 15 Paula Drive, Farmingdale, New York.

Q. Mr. Green, by whom are you presently employed?

A. Hersent Offshore, Inc.

Q. At what facility at Hersent are you employed? A. Projects Manager.

Q. Where? A. Worldwide.

Q. Are you presently working on a specific job for Hersent? A. No.

Q. In December of 1972, were you working on a specific job on behalf of Hersent? A. Yes.

Q. Where was that job located? A. Northville Industries.

Q. How long prior to December 18th, 1972, had you been working at that facility? A. Since August of the same year.

(4) Q. What was the capacity in which you were assigned to that job by Hersent? A. Project manager.

Q. Did this require your presence at a specific location on a daily basis? A. Yes.

Q. Where was that? A. At the job site.

Q. Is that at the offshore site? A. Yes.

Q. Would you give us some background as to what was being done at the Northville job site?

I mean, not piece by piece, but just generally, what was Hersent doing there? A. We were constructing an offshore terminal for the loading and unloading of tankers.

Q. And just so there isn't any mistake here, Hersent had formerly been known as De Long of New York, Inc.; is that correct? A. That's correct.

Q. Sometime shortly prior to December they changed their name to Hersent Offshore, Inc.; is that correct? A. That's correct.

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Q. What was the—in ball-park figures—the (5) cost of construction going on at this facility? A. \$2,800,000.

Q. And you were the on-site supervisor or manager of that job; is that correct? A. That's correct.

Q. Did your job encompass the supervision of an individual by the name of Frank Carr? A. It did.

Q. Who was Frank Carr? A. He was the dock builder's foreman.

Q. Did Frank Carr have a group of men working under him? A. He did.

Q. How many men did he have working under him? A. I don't know exactly. I don't remember exactly.

Q. I understand that, but one or two or ten or fifteen? A. Fifteen.

Q. Approximately. A. Yes, approximately fifteen.

Q. And they were working at the offshore site; is that correct? A. That's correct.

Q. Who was Captain McKay? (6) A. Captain McKay is a Vice President of Northville Industries in charge of the Northville project.

Q. Did he have anything to do with the Hersent project at Northville? A. Yes.

Q. In what capacity was he related to the Hersent job? A. He was Northville Industries' project manager.

Q. Could you draw a distinction for us between the duties that would fall within your responsibility and the duties which would fall under Mr. McKay's? A. My responsibility was the actual construction of the terminal as specified in our specifications and drawings.

Captain McKay was the client representative whom we would contact if it was necessary to deviate from the contract or, also, he would specify that or agree on the part of the client that the contract was being fulfilled.

Q. In a nutshell then he was more or less the on-site representative of the client to see that the job was being done as it should be done. A. Approximately, yes.

Deposition of Robert J. Green, July 30, 1973

Q. I make that definition in the broadest terms (7) and don't wish to hold you to any peculiarities that may arise subsequently.

• • •

(9) Q. I would like to draw your attention specifically to the week of December 12, 1972.

Were you at the Northville facility at any time during that week? A. Yes.

(10) Q. Were you there on the 12th? A. I don't recollect.

Q. When you were absent, was there somebody else who was assigned the duties of supervising the work on behalf of Hersent? A. Yes.

Q. What was his name? A. Frank Carr.

Q. Was anyone else in the office who was working for Hersent? A. Yes.

Q. What was his name? A. Joseph Miller.

Q. What was the relationship, if any, in the work, supervisory structure, between Miller and Carr, if any? A. Joe Miller was the office administrator. Frank Carr was the dock builder foreman.

Q. So then Mr. Carr would not take directions from Mr. Miller with respect to the work on board the #136 in the offshore facility. A. Yes, he would.

Q. In what respect would he take directions? A. If the word was being passed from me through Mr. Miller.

(11) Q. But other than independent of your issuing directions, Mr. Miller would not supervise or control the work of Mr. Carr; is that correct? A. That's correct.

• • •

Q. You are the project supervisor; is that correct? A. That's correct.

Q. To whom would the captain of the Tracy Miller report for his daily orders? A. To me.

Q. Would he report to anyone else? (12) A. No.

Deposition of Robert J. Green, July 30, 1973

Q. To whom would the captain of the tug, Paumanok, report for his orders each day? A. Me.

Q. When the Wayzoff was used by Hersent for, as you indicated towing, from whom would the captain of the Wayzoff take his directions? A. From me.

* * *

(16) Q. Do you recall whether you were present at the site on or about December 15th? A. I was.

Q. Could you tell us what took place with respect to the work performed by Hersent on that day? A. December 15th was a Friday?

(17) Q. Yes, it was.

Mr. Reidy: Ask to look at the log.

Q. If you want to, look at the log, anything you want to, to refresh your recollection.

I would rather get a straight answer then get you confused.

You are referring to the log of the tug, Paumanok; is that correct? A. That's correct.

On Friday, the 15th, we left Peterson's Dock at about 7:30.

Q. You left Peterson's Dock. On what vessel were you? A. I was on the Tracy Miller.

Q. Go ahead. A. And went to the site, went aboard the #136, and because the weather, the sea was so rough, we could do no work so we checked and secured some minor items of equipment and then the captain of the Tracy Miller pointed out or told me in his opinion the seas were getting very rough; that we had better leave the vessel while he could still get us off.

We went back then to Peterson's Dock and since it was obvious I could do no further work for the day, I (18) told the crew to go home and I went to the office for an hour and then went home.

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Q. The logbook of the Tracy Miller seems to indicate that you arrived at the barge at around 7:40 and you left the barge at around 9:45. Is that about your recollection? A. Yes.

Q. Who went on board the barge with you? A. The entire crew.

Q. That would be Frank Carr and his men.

* * *

(21) Q. What did you do—and if you wish to refer to the logbook on the day, on December 14th, 1972—at the job site? A. You mean the work we actually accomplished?

Q. Yes, in general terms. I am not asking you for the minute details. A. We set the top deck of the South West inshore breasting Dolphin and moved the barge from the west side of the terminal to the east side of the terminal and made one attempt to start the diesel hammer on some large piles that were already partially driven and then went back and secured in place.

Q. Was there a reason why you winched back and secured in place? A. Normal procedure.

Q. What were the weather conditions on the 14th? A. Flat, calm.

(22) Q. In other words, you worked what we might classify as a normal day. A. Yes.

Q. At the conclusion of the day, what did you do, if anything, with respect to securing the equipment; this is on the 14th? A. We winched back into a position where we would be free from the structures.

Q. All right.

Now, perhaps you better describe for us what you mean by winching back. I think I know it but it might be confusing on the record. A. The barge was secured on the four corners by lines, three of which went to mooring buoys, one of which went to an anchor.

There was sufficient latitude in the cable to allow us to move back, clear of the structure.

Deposition of Robert J. Green, July 30, 1973

When we were working, we would be right up immediately adjacent to the structure.

We winched back and drew the lines tight and set the locking dogs on the winches.

Q. When you say you moved the barge by winching, you winched by means of winches located on the boat itself; is that correct? (23) A. The skaget winches.

Q. At the conclusion of the day, in what general compass directions would the barge have been located on the evening of the 14th? A. North and south.

Q. Which direction would the bow be headed?

You are hesitating. Explain the difficulty you have with respect to bow and stern. A. It was a double rigged barge and strangely, what they considered the bow, I considered the stern.

Q. I agree with you a hundred percent. A. I would say the end with the trailer on it was facing the shore and the boom was pointing north, away from shore—no, the boom was pointing south, crane was on the north end with the boom pointing south.

* * *

Q. How did the boom lie with respect to the trailer? A. Over the trailer.

Q. Over the top of the trailer or— A. Yes.

Q. Approximately at the point of the trailer, approximately how high off the deck would the boom be? A. Ten or twelve foot.

(24) Q. How long was the boom on this crane? A. A hundred and seventy foot.

Q. How long was the boom on the crane when it arrived in August? A. A hundred and sixty feet.

Q. At some time a ten-foot extension was added; is that correct. A. That's correct.

Q. When the boom is lowered, we heard testimony that it's resting in a cradle of some sort; is that correct? A. Yes.

Deposition of Robert J. Green, July 30, 1973

Q. Approximately, how far from the base of the crane in feet was the cradle located? A. About a hundred ten foot.

Q. Do you have any pictures of the cradle? A. No.

Q. How high was the cradle off the deck? A. About fifteen foot.

Q. Mr. Mayer said that it had a timber on which the boom is rested; is that correct? A. Yes.

Q. And it had sides on it which were from six inches to a foot high. (25) A. I would say eighteen inches.

Q. Were these angle irons or metal of some kind? A. Channel iron, to the best of my memory.

* * *

(26) Q. Describe the box into which the block was dropped. A. It was a receptacle made from plate, an angle about four foot square at the top and about four feet deep, tapering down to nothing at the bottom.

Q. Do you mean it was in more or less the shape of a funnel, when you say it tapered down to nothing?

A. It tapered on two sides to nothing and straight down on the other two, but it had a slant to it.

Q. Did it have a top to it of any sort? A. No, open at top.

Q. Would you describe the interior of it.

Was it smooth, the interior? A. Yes.

Q. When you departed the vessel on the 14th, did you know anything with respect to, or observe anything being done with respect to the securing of the boom to (27) the deck? A. No.

Q. Had there at sometime prior to the 14th been a practice followed by Hersent of securing the boom to the deck? A. Yes.

Q. What was that practice? A. To run a bridle from the two corners of the barge to the load line of the crane.

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Q. What is the load line of the crane? A. The main fall.

Q. You mean by that a line that goes from a winch in the crane up the boom and down to the block; is that correct? A. No.

Q. What do you mean? A. I mean a line that goes from the drum on a crane through several sheaves on the block, multipart block.

* * *

(28) Q. Prior to the 14th, at sometime prior had it been a practice followed by Hersent—and I am not trying to put words in your mouth—whereby you had run a bridle from the two corners of the barge and to that would be affixed the load line from the crane? A. That's correct.

Q. Sometime prior to the 14th Hersent had stopped using that method of securing the boom; is that not correct? A. That's correct.

Q. Was that practice stopped at the time the ten-foot section was added to the boom? A. Yes.

Q. Turning to the 15th, did you employ or use this bridle as a means of securing the boom on the 15th when you departed the barge? A. No.

Q. Was any type of bridle or guy wire used to secure the boom when you departed the barge on the 15th? A. No.

Q. At any time prior to the 15th, had you in fact pumped out the internal compartments of the barge? A. Yes.

* * *

(29) Q. Were there hatch covers on the deck of Barge #136? (30) A. Yes.

Q. Did you ever have occasion to open any of these hatch covers prior to December 15th, 1972? A. Yes.

Q. On what occasion would you have opened them? A. We opened the rake end hatch covers to place ballast water and I don't remember opening any others.

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Q. Would you have had to open the hatch covers to pump water out of the barge? A. Yes.

Q. And whatever other than that you put in the rake covers? A. I don't understand.

Q. Whatever other than that was put in the rake compartment or-- A. We would have removed the hatch covers to pump any water out of the barge.

Q. My point is that you did in fact pump water out of the barge on prior occasions. A. Yes.

* * *

(31) Q. You stated that on occasion you would put water into the rake compartment. A. On one occasion.

Q. When was that? A. August.

Q. Do you know when you pumped that water out? A. We never did, not all of it.

Q. Was that to make the barge ride level? A. It was to counteract the weight of the crane at the other end.

Q. Did you maintain any sort of device at the site to keep yourself apprised of weather conditions in December of 1972. Did you have a radio? A. Did I have a radio?

Q. Did anyone who was employed by Hersent have a radio on the site for the purpose of receiving weather broadcasts?

Mr. Reidy: You are asking him what the purpose of keeping a radio was?

(32) Mr. Hanan: I will rephrase the question.

Q. To your knowledge, were there any radios capable of receiving weather forecasts on the site at Mattituck?

A. Yes.

Q. Who maintained those radios? A. The crewboat.

Q. Was there any radio in your office in the Northville Plant? A. No.

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Q. Was there a radio specifically designed to receive notification about weather forecasts on the site? A. No.

Q. Do you know what I am talking about? A. Yes.

Q. There is such a radio?

Mr. Reidy: What?

The Witness: Radio shack. It gives you continuous weather.

Q. You didn't have anything of that sort on the site? A. Not at the site.

Q. Did you have one available to you? A. At home.

(33) Q. At your home. A. Yes.

Q. What is the purpose of your having that at home, to keep yourself advised of weather conditions at the site?

Mr. Reidy: Once again, I think by using the word purpose, I think you are asking for the operation of his mind.

Q. Did you use that radio to ascertain weather conditions in the Mattituck area? A. No.

Q. You did not. A. No.

Q. You did not push it to get weather reports? A. Yes.

Q. But the weather reports you were seeking had nothing to do with the weather in the Mattituck area, is that the distinction? A. No.

Mr. Reidy: No what? No, it wasn't?

Q. I don't want to confuse you.

You had the radio; is that correct? A. I had the radio, yes.

Q. Did you use that to determine weather conditions (34) in the Mattituck area? A. I used the radio to get weather forecasts.

Mr. Reidy: As opposed to reports.

Deposition of Robert J. Green, July 30, 1973

Q. Then you did use that to receive weather forecasts; is that correct? A. That's correct.

Q. Was that radio operating on December 15th, to the best of your knowledge? A. Yes.

Q. Did you use it on December 15th? A. Yes.

Q. Did you use it on December 14th? A. Yes.

Q. Did you use it on December 16th? A. Yes.

Q. 17th? A. I don't remember.

Q. The 17th was a Sunday. A. I don't think so.

Q. You didn't use it on Sunday. A. I don't think so.

Mr. Reidy: All this time we are talking about him using the radio at his home.

* * *

(35) Q. Now, you told us that you used the radio on the 14th, 15th and you believe on the 16th. And by using it, I am making an assumption that is you received weather forecasts on those days; is that correct? A. That's correct.

Q. Did you use it on the 14th after you had arrived at home from work? A. No.

Q. Did you use it on the 15th prior to going to work? A. Yes.

Q. When you went to work on the 15th, did you do anything specifically as a result of the information you had received on the weather forecasts? A. Yes.

Q. What did you do? A. Secured small items of equipment.

(36) Q. Did you do anything else? A. No.

Q. That was the sole activities engaged in by the crew during the two hours they were on board the barge on the morning of the 15th; is that correct? A. That's correct.

* * *

Deposition of Robert J. Green, July 30, 1973

(37) Q. Where were you on the 16th? A. At home.

Q. Does Hersent maintain any records which would enable you to determine the hours worked, if any, by the members of the crew of the tug, Paumanok, on the 16th?
A. No.

Mr. Reidy: You mean in addition to the payroll ledgers?

Mr. Hanan: Well, they don't show that they worked on the 16th.

(38) A. (Continuing) The log.

Q. The logbook is the sole record that you know of which would indicate that they did in fact perform any work on the 16th; is that correct? A. That's correct.

* * *

(39) Q. At any time, did you attend at the Hersent facility at Mattituck? By that I mean, either the office in the Northville building or the offshore site, on December 16th. A. No.

Q. 17? A. Yes.

Q. What time did you arrive at the location on the 17th?
A. About 10:00 o'clock.

Q. Had someone told you something which made you come to the scene on the 17th? A. Yes.

Q. Who had told you and what had he told you? A. Captain McKay had called me and informed me that the barge had overturned.

(40) Q. Approximately what time did you receive that phone call from Captain McKay? A. About 8:30, approximately.

Q. 8:30 A.M.? A. Yes, in the morning.

Q. You immediately went to the site; is that correct?
A. Yes.

Q. About what time did you arrive there? A. About 10:00 o'clock.

Deposition of Robert J. Green, July 30, 1973

Q. What did you see with respect to the barge at 10:00 o'clock upon your arrival? A. That it was, in general, in the same position but it was overturned and only a portion of the northern end out of the water.

Q. In other words, it was in the same general north-south— A. Yes, same location and position.

Q. From the close of business on the 14th to the time you departed the barge on the 15th, had anything been done to change the mooring lines? A. No.

Q. Did Captain McKay advise you as to how he had learned of the capsizing? (41) A. Yes.

Q. What did he say to you? A. He said that the gauger had told him.

Q. Who is the gauger? A. The man on duty at the Northville Plant.

Q. Where is he located. Where is the plant located with respect to the offshore site? A. About a mile and a quarter directly inshore.

* * *

(42) Q. You didn't pay Northville for that man's services, did you? A. No.

Q. To the best of your recollection, did you give the tug, Paumanok, any orders at the conclusion of work on December 15th? A. I instructed him to come in and stand by on the 16th.

Q. Was he to perform any duties on the 16th.

Was he instructed to perform any duties other than stand by on the 16th? A. To observe the barge and stand by, that's all.

Q. How many days a week did Frank Carr's group work on the site? A. Six.

Q. What days would those have been? A. Monday through Saturday.

Q. Were they on the site on Saturday, the 16th of December? A. No.

(43) Q. Was that pursuant to your directions? A. Yes.

Deposition of Robert J. Green, July 30, 1973

Q. When did you give them those directions? A. On Friday.

Q. At what time on Friday? A. 11:00 o'clock or 10:00 o'clock.

Q. Were they paid for Saturday of that week? A. No.

Q. Did you have any work scheduled for Saturday the 16th? A. Yes.

Q. But you chose not to perform the work; is that correct? A. That's correct.

Q. Was there a reason why you directed them not to appear on the 16th? A. Yes.

Q. What was that reason? A. I had had a weather forecast for inclement weather for the period of Friday and Saturday.

Q. Based upon that, you decided not to work on Saturday; is that correct? A. That's correct.

Q. Were there any other employees of Hersent at the (44) site; to your knowledge, were there any employees at the site on December 16th, which was a Saturday? A. Not to my knowledge.

Q. Now, you stated that the tug, Paumanok, was directed to stand by on Saturday; is that correct? A. That's correct.

Q. At what location was it directed to stand by? A. At Mattituck Inlet.

Q. Is that the pier where it is normally berthed during non-working hours? A. Yes.

Q. Have you reviewed any written documents prior to testifying here today?

Did you look at any papers, did counsel show you any papers prior to your testifying here today? A. Just the logs.

Q. Have you ever given anyone a written statement with respect to the events of December, on or about December 18th, 1972? A. Only to counsel.

Q. When did you give that statement? A. Last week.

Q. Did you review that statement prior to testifying here today? (45) A. Yes.

Deposition of Robert J. Green, July 30, 1973

Mr. Hanan: I call for a production of a copy of it.

Mr. Reidy: And declined.

* * *

(46) Q. Was it ever necessary to perform any repairs to that crane prior to December 18th, 1972? (47) A. Yes.

Q. Would you describe the date of the repairs for us?

A. We had to replace the swing dog.

Q. Could you describe that to us.

What is the swing dog? A. It's a mechanism in the workings of the crane to lock the cab of the crane in a particular position in relationship to the tracks.

Q. If I over-simplify this, please tell me.

The crane rotates on its tracks; is that correct? A. Rotates on a turntable on its tracks.

Q. And the turntable has gears in it; is that correct? A. Yes.

Q. And the dog sticks into those gears and stops it from turning; is that correct? A. In fundamentals, it's correct.

Q. In simplest terms. A. Yes.

Q. That's the dog that needed repairs sometime prior to the 18th; is that correct? A. Yes.

(48) Q. What had happened to it? A. It had been damaged during installing of some heavy piling.

Q. To your knowledge, had any other repair work been made on the crane prior to December 18th? A. Nothing of any major—

Q. I am assuming there was normal maintenance. A. Of course.

Q. Has the barge been salvaged? A. Yes.

Q. Has the crane been salvaged? A. What do you mean by salvaged?

Q. Has it been raised up off the bottom? A. Yes.

* * *

Deposition of Robert J. Green, July 30, 1973

(51) Q. Has anyone rendered a report to you reporting the facts and circumstances of this loss? A. Facts and circumstances, no.

Q. No written reports of any sort. A. No.

Mr. Reidy: I believe there was a diving report with respect to the salvage. I don't know if that's within the purview of the question.

(52) Mr. Hanan: It was a broad question and I certainly understand the confusion of the witness.

If you have a diving report, I would like to request a copy.

Mr. Reidy: We will make it available.

Mr. Hanan: And any other reports that were rendered by salvagers subsequent to the signing, if they are available.

Q. On the night of the 15th when you departed the barge, was the boom at that point in time passed over the trailer, level or at any angle? Does that make sense to you? A. Yes, it makes sense.

Mr. Reidy: Explain it to me. I don't understand it at all.

Q. My point is this: The boom from the point at which it leaves the crane is not parallel to the deck of the barge, is it? A. That's correct. It's about six feet in a hundred, or something like that, of an upward incline.

Mr. Reidy: While it's resting in the cradle.

Q. About six feet, and I'm not holding you to that. I understand that your eye is only so good.

In other words, as it passed over the crane, (53) it was—excuse me—as it went over the trailer or it was rising— A. Slightly, yes.

Q. So the end of the crane, the boom was higher than the point of the boom immediately over the trailer? A. Yes.

Deposition of Frank W. Carr, November 9, 1973

Q. Could you tell us how high, how much higher? A. No.

Q. How much beyond the end of the barge did the crane boom extend as it lay in the cradle at the close of business on December 15th? A. About fifty-five feet.

Mr. Hanan: I have no further questions.

* * *

Deposition of Frank W. Carr, November 9, 1973.

(3) *Examination by Mr. Hanan:*

Q. What is your name? A. Frank W. Carr.

Q. Where do you live? A. 4940 Pequash Avenue, Cutchogue, Long Island.

* * *

Q. By whom were you employed in December of 1972? A. Hersent Offshore, Inc.

Q. In what capacity were you employed by Hersent in December, 1972? A. Dock builder foreman.

Q. At what facility were you located? A. Northville Industries.

(4) Q. What was the job on which you were working at that time? A. Offshore platform for docking of ships.

Q. For how long a time prior to December 17, 1972 had you been employed by Hersent? A. I believe it was September 15 I was employed.

Q. Was that again as a foreman? A. Not originally.

Q. What was your original employment by Hersent? A. Dock builder.

Q. Did there come a time when you were made foreman? A. Yes.

Q. Approximately, when was that? A. I don't know the date.

Deposition of Frank W. Carr, November 9, 1973

Q. Would it have been prior to the 1st of December? A. Oh, yes.

Q. Would you describe the nature of your duties as foreman for Hersent at this site? A. To allocate the work; to see that it is done properly.

Q. How many men did you have working under your direction? A. Approximately, thirteen at that time.

Q. Did these men have a job description? By that, (5) I mean were they classified as dock builders, carpenters or builders? A. Yes. Each man had a classification.

Q. Could you tell me, to the best of your recollection, the classifications of the men working under you at the time? A. There were seven dock builders, and five engineers, and a superintendent.

Q. Who was the superintendent? A. Robert Green.

Q. Did he work under your direction or did you work under his direction? A. I worked under his direction.

Q. What was Mr. Green's position in December of 1972, to the best of your knowledge? A. Superintendent of construction.

Q. Was there anyone on the site and employed by Hersent who supervised Mr. Green, to your knowledge? A. No one on the barge.

Q. Do you distinguish as being on the barge from being on shore? A. Yes.

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(6) Q. That's fine. Did Mr. Green have an office at the facility? A. Yes, at Northville Industries.

Q. Do you know by whom that office was manned in addition to Mr. Green? A. Joseph Miller. I don't know what the title was, but he manned the office.

Q. He was an employee of Hersent? A. Yes.

Q. Were there any other employees of Hersent in that office, to your knowledge? A. No.

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Deposition of Frank W. Carr, November 9, 1973

(8) Q. Now, going back for a moment to September, in September when you completed work, was anything done to the boom of the crane at the completion of work each day? A. Yes. It was boomed down and into a cradle and how shall I say, locked down.

Q. Could you describe the cradle for me? A. Two upright H beams with a cross beam which was braced to the stern of the barge.

Q. Approximately, how high was the cradle off the deck? A. Fifteen feet.

Q. And approximately how wide was the cradle? A. Eight feet.

Q. Was anything done with the block on the end of (9) the cradle attached to the crane when it was lowered in September? A. In September—yes. That was secured to the stern of the barge.

Q. Could you describe for us how it was secured to the stern of the barge? A. On the port and starboard side was two long cables which came in a "V" which locked to the block.

Q. And that was strain taken— A. Strain taken on the boom cable.

Q. On the boom cable? A. On the boom cable.

Q. It was held in place? A. Excuse me, not on the boom cables, on the No. 1 and 2 as we call it.

Q. Could you describe for me what is a No. 1 and 2? A. That's the lifting drums of the crane.

Q. Do those cables run through the boom? A. Through the boom down to the block.

Q. They would go up the boom and out the top of the boom and down to the block; is that correct? A. Right, two separate ones.

Q. Two separate cables? A. Right. When the boom was secured, there wasn't (10) any strain on the boom cable.

Q. By boom cable, you mean the cable holding the boom up? A. Right.

Deposition of Frank W. Carr, November 9, 1973

Q. The No. 1 and 2, could we call them lifting cables, you mean which are used to raise items? A. That's correct.

Q. And the strain was taken on those two cables with the block attached to the cable that runs from the port and starboard corner of the stern of the barge; is that correct? A. Yes.

Q. Were any other cables used to secure the boom to the deck? A. No.

Q. At any time between September and December 15, were any other cables used to secure the boom in place while you were present? A. I don't know what time, but we made a cradle for the block after that, and we used to put the block in there; and that way we did away with the V cables securing that, because we had put a boom section on, and it was too long to do that.

Q. After you put the additional section, you (11) discontinued the practice of securing the block to the cable across the stern of the barge; is that correct? A. Yes.

Q. When you placed the block in this cradle, was it affixed to its cradle in any manner or did it rest? A. It rested in the cradle.

Q. Did you then take a strain on the No. 1 and 2 cables? A. Just to take the slack out of the cables. There was no tension.

Q. How high off the deck over the stern was the boom after you added the twenty-foot section to it? A. High over the deck?

Q. Yes. A. The same—fifteen feet.

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(12) Q. Did anyone direct you to discontinue using the No. 1 and No. 2 cables to secure the boom to the deck after the twenty-foot section was added? A. No. It wasn't feasible.

Q. It was not practical to do that; is that what you are saying? A. Yes.

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Deposition of Frank W. Carr, November 9, 1973

Q. In September, in addition to securing the boom by means of No. 1 and 2 cables when you departed the vessel at the conclusion of your day's work, were any other specific acts done to secure the boom, crane, or other equipment located on the deck? A. Just the engineer put the house lock in, as they call it.

Q. What is the house lock? A. It's a lock that keeps the crane from swinging from side to side.

Q. Did the Hersent employees, to your knowledge, (13) do anything to secure it? A. I was Hersent and my men were Hersent employees.

Q. Other than affix the cables, the No. 1 and No. 2 cables, and put on the house lock, that's all that was done in September? A. To secure the rig?

Q. That's right. A. Yes.

Q. That was the practice that you followed each day at the conclusion of work? A. Yes.

* * *

Q. Between September and up until the time the twenty-foot section was added, were there periods you were unable to work on the barge because of bad weather? A. Yes.

Q. During those periods of time, did you take any special precaution with respect to securing the equipment on board the deck of the barge? (14) A. Everything was checked over to see that it was secured.

Q. By saying it was secured, what did you check? A. All the external equipment that we had that was welded or cabled down; the hatches were closed; I believe we put a four-inch nylon line to a heavy anchor that Northville had there plus the four anchor cables.

Q. How many hatch covers were there on the deck Hughes 136, the barge that was known as the Hughes 136? A. I am not sure.

Deposition of Frank W. Carr, November 9, 1973

Q. The barge on which the crane was located, how many hatch covers were there in the deck on which the crane was located? A. I don't know specifically. I think approximately eight or ten.

Q. Did there come times when you had occasion to open these hatch covers? A. Yes. We inspected them for water leaks.

Q. How often did you inspect them for water leaks? A. I would imagine every three days, approximately.

Q. During the period that you were on board the barge and specifically prior to the event, December 17th, did you ever find water in the hold of the barge? A. Not to my knowledge—I am trying to think.

• • •

(15) Q. Where was the barge when the boom section was added to the boom? (16) A. Mattituck Inlet.

Q. How did the barge get to the Mattituck Inlet? A. Towed by tugboat.

Q. Was it a tugboat that was regularly on the site? A. Yes, the Paumanok, I believe.

Q. Were any other tugboats employed to tow the barge on that occasion? A. I don't believe so.

Q. Were you present when it was towed? A. Yes.

Q. Who was on board the barge during that tow, if you can recall? A. The whole crew.

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(17) Q. Can you tell us what the practice was with respect to securing of the boom after the twenty-foot section had been added? A. That's where the block was put in a separate cradle other than the boom cradle and just laid to rest.

Q. What was done with the boom? A. The boom was laid in its own cradle, and the block was laid in its own cradle.

Q. Was anything else done to secure the boom in place? A. No.

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Deposition of Frank W. Carr, November 9, 1973

(20) Q. Who used or employed the crew on the Tracey Miller? A. Hersent.

Q. For what purpose was it used? A. Transport men from the dock site to the job site.

* * *

(22) Q. Now, you told us that you worked on some Saturdays, and you didn't on other Saturdays; is that correct? A. Yes.

Q. Who gave you the orders to work or not work on Saturday? A. Bob Green.

Q. And who was to tell the men who worked for you whether they were to report on a Saturday for work? A. I would.

* * *

(23) Q. Did you report to work on Friday? A. Yes.

Q. To the best of your recollection, can you remember what you did on Friday? A. We went to the work site, and it was too rough to work. So we checked everything over to make sure it was secure; and then came back into Mattituck.

Q. Who was with you when you went out to the barge on Friday? A. The whole crew was there.

Q. Did that include Mr. Green? A. Yes. He was there.

Q. Approximately, how long a time did you spend on the barge on Friday? A. I believe we spent a half a day or morning on the barge.

Q. Some time during the morning, you departed? A. Yes.

Q. Who gave you the direction to depart the barge?

(24) A. Mr. Green.

Q. Did he give you any reason why you were leaving the barge? A. The weather was too rough to work.

Q. To your knowledge, was there any device maintained on the barge through which you were able to ascertain weather conditions and forecasts? A. No.

Deposition of Frank W. Carr, November 9, 1973

Q. Was there any device in the immediate vicinity by the use of which you could ascertain weather forecasts?
A. No. Just a telephone on shore.

Q. Did the boat Paumanok have a radio? A. Yes.

Q. Did the Tracey Miller have a radio? A. Yes.

Q. Do you know whether or not there was maintained on the shore facility a radio through which weather forecasts could be received? A. Hersent didn't have one. I believe Northville had a radio.

Q. Was that in the offices in which Hersent had its offices? A. Yes.

Q. Did Mr. Green say anything to you with respect (25) to weather forecasts prior to your departing the vessel on Friday? A. He wanted an opinion if we should tow the barge back to Mattituck because the forecast for the week-end was twenty knot winds, and it was decided we leave it there because there wasn't enough wind to warrant going back to Mattituck.

Q. The barge, in what position had the barge been placed when you departed on Friday morning? A. Each day we put the barge into where the work was, and each night we would pull it back to a safe position away from the platform.

Q. Where was the barge when you left it on Friday morning? A. In reference to what?

Q. Your work site or the safe position that you had referred to? A. South.

Q. Had you pulled it away from the work site prior to departing on Friday? A. I believe we pulled it away Thursday night and that's where it was Friday morning.

Q. Was the barge moved at all on Friday? A. Not to my knowledge.

(26) Q. What vessels were at the site on Friday morning? A. The Tracey Miller, and I don't know about the Paumanok, I can't remember if it was there at the time.

Deposition of Frank W. Carr, November 9, 1973

Q. As a general practice, was the Paumanok usually at the site? A. Yes.

Q. Where would the Paumanok be when not performing some specific job at the site? A. We generally anchor off a buoy, a Northville buoy, around the site.

Q. A couple of hundred yards away from the site? A. Yes.

Q. Towards the shore? A. Either way. Any place of five or six places around the site.

Q. There are five or six buoys; is that what you are saying? A. Yes.

Q. Were they permanent moorings maintained by Northville? A. Yes.

* * *

(27) Q. Prior to December 15th you have told us that there were occasions when because of weather conditions you did not work on the barge; is that right? A. Yes.

Q. Were there ever occasions when you were working and you had to terminate your work during the day because of weather conditions? A. Yes.

Q. Who made the decision on these prior occasions to terminate work and depart the vessel? A. Bob Green.

(28) Q. Let's go back to Thursday. At the completion of work on Thursday, what did you do with respect to securing the boom, if anything? A. The boom was laid in its cradle and the block was laid in its cradle.

Q. Was anything else done to secure it? A. House lock was set on the crane.

Q. Anything else? A. We put up some lights, running lights—not running lights, anchor lights, whatever.

Q. Was anything else done? A. The rig was pulled back to a safe position.

Q. When you say it was pulled back, were the anchor lines made tighter or looser? A. They were kept tight.

Deposition of Frank W. Carr, November 9, 1973

Q. And the anchor lines ran off the bow and stern corners of the barge; is that correct? A. Yes. The stern anchors were "X'd" as we say and the bow anchors were breasted.

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Q. You say you took the strain on those lines on Thursday after the work was completed; is that correct? (29) A. Yes.

Q. On Friday morning, did you do anything to the anchor lines? A. I don't remember.

Q. You don't remember doing anything to them; is that correct? A. That's correct.

Q. While you were on board on Friday morning, did you do anything with respect to securing equipment on the deck of the barge? A. One thing in particular, we welded pad eyes, and secured that with cable.

Q. Is that a new hammer that had come aboard? A. No. That was 030 hammer. The Diesel hammer we had was lying across the deck, and we had that cable down.

Q. Also the pad eyes? A. Yes.

Q. When you went ashore on Friday, did you receive any instructions from Mr. Green? A. No. I don't—there wasn't to be any work Saturday. So we didn't have to report till Monday morning.

Q. Prior to December 15, did you ever receive any calls while at home to report to work immediately from Hersent? (30) A. Prior to December 15?

Q. December 15; yes. A. I believe there was one Sunday that we—there was a worker on shore that watched the barge, and he had seen it move. He said so. We went out on a Sunday and secured the barge more securely.

Q. That was some time prior to December 15th, the Friday, December 15th, when you departed the barge? A. Yes.

Deposition of Frank W. Carr, November 9, 1973

Q. Who went out with you on that day, if you can remember? A. We used a Northville tugboat.

Q. What was the name of that Northville tugboat? Is that the Waysoff? A. Waysoff; and this fellow Mill—I can't remember his last name.

Q. Miller? A. Not Miller. Mel was his first name. He came from Albany, and that's the only people I can recall now.

Q. Was Mr. Green there? A. No.

Q. Was that prior to Mr. Green being employed at the site? A. No.

(31) Q. What did you do when you reached the shore on Friday morning? What did you personally do? A. Friday?

Q. This is Friday before the capsizing? A. I don't remember.

Q. Did you go home? A. Yes.

(36) Q. Can you describe the weather conditions on Friday morning when you departed the barge? A. We had high seas, and I believe the wind was out of the east. The barge was rocking quite a bit.

Q. Could you describe the height of the waves, if you could? (37) A. No. Just be an opinion.

Q. Give me your best estimate. A. Ten feet waves.

Q. You think approximately ten feet? A. Yes.

Q. Can you give me your approximation of the wind? A. Twenty miles an hour, twenty knots.

* * *

Q. Did you have any difficulty getting off the barge on Friday morning? A. No.

* * *

(39) Q. Did you talk to the crew members of the tug Paumanok following the capsizing of December 15, 1972? A. I have talked to them.

* * *

Deposition of Robert J. Green, January 30, 1974

Q. You had no discussions with them with respect to whether they worked on Sunday? A. I don't believe anyone went out that day. It was too rough.

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Deposition of Robert J. Green, January 30, 1974.

(3) Examination by Mr. Hanan:

Q. Mr. Green, by whom are you presently employed?
A. Hersent Offshore, Inc.

Q. Are you the same Mr. Green who appeared previously for the taking of his deposition? A. I am.

Q. Hersent Offshore has filed an amended answer alleging an additional counterclaim, and I would like to make some inquiries with respect to the facts of that counterclaim, and specifically I refer to December of 1972. Did there come a time in December, when the Hughes #136 capsized at your facility in Manitowoc, Long Island?
A. Yes.

Q. What was the first notice you received of the (4) capsizing? A. Myself, personally?

Q. Yes, sir. A. A telephone call from a Captain McKay, notifying me that the barge had overturned.

Q. Who is Capt. McKay? A. He is an employee of the Northville Industries.

Q. And Northville Industries was the company for whom you have been building a dock? A. That is correct.

Q. Approximately what time did you receive this notification? A. To the best of my memory, about nine o'clock in the morning.

Q. During what day of the week? A. Sunday.

Q. What did you do after you received this phone call from Capt. McKay? A. I telephoned my superior, and arranged to meet him en route and proceeded to the site of Northville.

Deposition of Robert J. Green, January 30, 1974

Q. Who was your superior? A. Mr. Hans Wendel.

Q. Where was Mr. Wendel located at the time you contacted him? (5) A. He was at home.

Q. Where was that? A. I don't know the exact address, but it is in Huntington.

Q. Long Island? A. Yes, sir.

Q. Did you then proceed to the site? A. I met Mr. Wendel at a prearranged location on the Expressway. I don't remember the exact location, and we changed to one car, his car, and proceeded to the site.

Q. What did you find upon your arrival at the site? A. Well, the seas were too rough for us to attempt to get out to the actual site. We observed the barge from the bluff inshore, a mile and a quarter inshore from the location.

Q. Could you describe the barge to me, in general terms? A. The barge was upside down, one corner of the barge being submerged, the other three corners showing with the waves breaking over it apparently in the same location as when we had left it.

Q. It is my understanding that the barge was being used in conjunction with your building an offshore (6) docking facility, is that correct? A. That is correct.

Q. Was there any equipment located on the barge prior to it capsizing? A. Yes.

Q. What was that equipment? A. In general, cranes; a crane, excuse me; welding machines; compressor; generators; the office trailer which was used as an office and change house.

Q. Was this equipment affixed to the deck of the barge in any fashion? A. It was lashed down, by that I mean some of it with cables and turnbuckles.

Q. Now, for how long a period prior to December 17th, had this equipment been on the barge Hughes #136? A. Approximately since September, when we started.

Q. Where had the barge been located since September of 1972? A. In the same general area.

Deposition of Robert J. Green, January 30, 1974

Q. In other words, it was moored at your site, is that correct? A. Not permanently, it was moored, it was operating at the site. We changed the moorings and moved it around to suit the work.

(7) Q. Would it be fair to say that the barge was used as a work platform from which you performed certain activities on a more or less daily basis? A. It was, yes.

Q. As opposed to it being used to transport goods from the shore to the work site? A. Definitely, it was a work platform. Very small use of it as a transport.

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Q. Was the crane moved back and forth on the barge during the course of your work? A. Not normally, there could be occasion when we could unlash it, so to speak, and move it closer to the end or more to the middle, if the work warranted it.

To the best of my knowledge, we had not moved it.

(8) Q. Would the same be true of the two compressors that were located on the deck of the barge? A. I believe there was only one compressor on the deck of the barge and it had a U-bolt welded over the axles. It wasn't moved, it was stationary.

Q. Would the same be true of the trailer? A. The trailer also was tied down.

Q. I understand there was other miscellaneous equipment such as heavy pile driving hammers on board, is that correct? A. That is correct.

Q. I assume those were used in your more or less daily operation? A. That is correct. They were used for the work.

Q. And they remained on the barge on a daily basis? A. Yes, sir.

Q. And when not in use, they were secured to the deck in some fashion? A. Not normally, no, sir. Normally, one hammer was secured to the deck, the other hammer was placed in the middle, which was surrounded by fixed objects where it couldn't slide.

Deposition of Robert J. Green, January 30, 1974

Q. Did you communicate with anyone other than Mr. (9) Wendel immediately following receipt of the advice from Capt. McKay that the barge had capsized? A. I did not, no.

Q. Did someone on behalf of Hersent Offshore, to your knowledge? A. To my knowledge, Capt. McKay did notify the Coast Guard immediately.

Q. Did you receive any communications from the Coast Guard? A. I did not, no.

Q. Did anyone associated with Hersent Offshore receive any communication from the Coast Guard? A. Not directly, not to my knowledge.

Q. I would like to broaden the question.

Did you receive any direct communication from the date of the accident to the present date from the Coast Guard? A. No, not to my knowledge.

Q. Did you receive any communication from the Corps of Engineers? A. Again, not to my knowledge.

Q. To your knowledge, was anyone else, in addition to the Coast Guard notified of the capsizing, immediately after your learning of the capsizing? (10) A. To my knowledge, Armitage & Company were our insurance, the broker was notified. I don't know exactly what time it was accomplished.

Q. Some time subsequent to your learning, they were advised? A. I think as soon as they could get in touch with them. This was on a Sunday.

* * *

Q. Subsequent to your arrival at the scene with Mr. Wendel, did you do anything with respect to the Hughes #136 and the equipment, at any time. In other words, Monday, Tuesday, Wednesday. A. Yes. As soon as the weather was suitable, we went out to the barge.

(11) Q. How did you get out to the barge? A. With crew boat.

Q. What was the name of the crew boat? A. Tracy Miller.

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Q. Utilized on a more or less daily basis by Hersent Offshore, Inc.? A. Yes.

Mr. Reedy: Talking about prior to that date?

Mr. Hanan: Yes.

Q. Boat used under charter? A. It was.

Q. Boat you manned, and victualed the crew? A. We paid the crew. We didn't victual it by the way.

Q. Who accompanied you on this voyage out to examine the Hughes #136, if you remember? A. Of course the diver who we took out. I believe, I don't know the first one, but certainly Capt. Smith.

* * *

(12) Q. Did the diver go overboard? A. Yes.

Q. Did he make any report to you with respect to his findings? A. He did. He reported his primary objective was to observe if there was any large damaged areas on the deck, and what, if any, equipment, as best he could ascertain, was left on the deck.

Q. What did he report to you? A. He reported that—I believe first of all, that the hammer, the vulcan hammer was still on deck. The anchor winches, and he reported one object hanging from a chain, which he thought was a welding machine.

Q. Was he able to locate the crane? A. No. He did not go to the bottom.

* * *

(13) Q. Did the diver report any other damage to the barge to you upon his, immediately following his inspection? A. He did not make a detailed inspection and he reported no visible large tears or indentations in any manner.

Q. How was the barge held in place at the time the diver made the inspection? A. By four inch and a quarter wire rope, three of these extending to permanent moorings, and one to an anchor.

* * *

Deposition of Robert J. Green, January 30, 1974

(34) Q. I believe you also had, in effect, an insurance policy known as a hull insurance policy on the Hughes #136, is that correct, if you know? A. I think so, yes.

Mr. Reedy: We will so stipulate.

Q. Did you have anything to do with the obtaining of that policy of insurance? A. Personally, no.

* * *

(38) Q. Approximately how deep was the water at the area where the barge capsized? A. About between 50 and 60 feet, where the barge capsized.

Q. You mentioned on Mr. Hanan's deposition, that Capt. Smith, representing Continental, accompanied you to one of your, either first or among your first visits to the capsized barge. Who was Capt. Smith's employer, if you know? A. I don't know exactly. I believe a surveyor, Marine Surveyor Company.

Mr. Reedy: I would suggest it be Hull & Cargo Surveyors, Inc., is that correct?

The Witness: That rings a bell.

Q. During any of the salvage operations, was any other representative of that company present? A. Yes, a Mr. Brush.

Q. Anybody else from that company? A. Not to the best of my memory.

Q. With respect to each phase of the salvage operations, was either Capt. Smith or Mr. Brush present and advised as to what was going on? (39) A. Yes.

Q. Did they ever indicate to you that they thought you should not do anything that was being done with respect to salvage operations? A. No.

Q. Did anybody on behalf of the Continental Insurance Company so advised Hersent with respect to any of the salvage operations? A. Not to my knowledge.

* * *

Deposition of Robert J. Green, January 30, 1974

By Mr. Hanan:

Q. From whom did you receive your directions with respect to the salvage operations? A. From Mr. Wendel. The day to day decisions were made by myself.

• • •

(40) Q. Did anybody in Hersent at any time tell you that you were to do what Mr. Brush or Mr. Smith told you to do? A. No.

• • •

By Mr. Hanan:

Q. Is it your testimony that Mr. Smith or Mr. Brush were present each and every day commencing December 18th through May 7, 1973? A. No, sir.

Q. Then they did not in fact oversee each and every operation of salvage, did they? A. No, sir.

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**Findings of Fact and Conclusions of Law, Filed
January 6, 1977.**

(Document No. 46)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

• • •

FINDINGS OF FACT

1. Plaintiff, The Continental Insurance Company (hereinafter "Continental"), is a corporation incorporated and existing under the laws of the State of New York. It maintains an office at 80 Maiden Lane, New York, New York, and its principal business is property and casualty insurance.

2. The defendant, Hersent Offshore, Inc. (hereinafter "Hersent"), is a corporation incorporated and existing under the laws of the State of New York. It maintains an office at 500 Old Country Road, Garden City, New York, and its principal business is marine engineering and marine construction.

3. On or about July 24, 1972, Continental issued Hull Policy No. HC 01 27 81 to DeLong of New York, Inc., insuring Barge #136, Crawler Crane (Manitowoc #4100W), and Miscellaneous Equipment; the total amount insured being \$436,000.00. Endorsement No. 5 thereto effective October 13, 1972, changed the name of the insured from DeLong of New York, Inc., to Hersent Offshore, Inc. (The terms and conditions of the Hull Policy more fully appear in defendant's Exhibit A.)

4. On or about July 24, 1972, Continental issued Protection and Indemnity Policy No. P & I C-72124 to DeLong of New York, Inc., insuring against certain risks pertaining to the aforesaid Barge #136. (The terms and

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conditions of the Protection and Indemnity Policy more fully appear in defendant's Exhibit B.)

4A. On October 1, 1971, Barge #136 was sold by James Hughes, Inc., to Peter Kiewit Sons' Company, and was leased in July of 1972 to Hersent, then known as DeLong of New York, Inc., under a bare rental equipment lease agreement. Barge #136 had been constructed at Pittsburgh, Pennsylvania, in 1943, as a steel derrick barge for the United States Army. It had a length of 135 feet, a breadth of 50 feet and a depth of 11 feet. It was a square rake-ended barge and was flat bottomed.

5. The Hull Policy contained, among other provisions:

- (a) A clause insuring Hersent against loss caused by perils of the sea, specifically the waters of Long Island Sound;
- (b) A clause insuring Hersent against certain additional perils, sometimes called the "Inchmaree Clause;" and
- (c) A "Storm and Heavy Weather Plan" (hereinafter the "Plan").

The Plan required Hersent to designate a person "responsible for making judgment as to the severity of conditions, and to see that the proper procedures are followed." Robert Green was the person so designated by Hersent.

6. The Storm and Heavy Weather Plan of the Hull Policy contained three conditions, "A", "B" and "C". Continental relies only upon Condition B as being a defense to the claim of Hersent. The terms of Condition B were as follows:

"Defined as an alert condition with a hurricane or northeast storm well offshore. Heavy swells can be expected from the East and Northeast, causing a vessel moored to roll heavily.

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1. If conditions are forecast to be quite severe, crane booms will be lowered and cradled, and secured in place.
2. Gear and equipment on deck will be secured against movement.
3. Aft mooring lines will be slacked off enough to allow vessel to swing head into the seas and swells for better riding. If possible, vessel will be allowed to ride to head line moorings and anchor with fairly equal strain on each unit.
4. An alert will be given for tugs to stand-by in case conditions become unduly severe and assistance be required."

7. The Protection & Indemnity Policy included coverage of certain wreck-removal costs when such removal has been made compulsory by law. Salvage, however, was not covered in that policy, which additionally stated, "Where the assured is, irrespective of this policy, covered or protected against any loss or claim which would otherwise have been paid by this Company, under this policy, there shall be no contribution or participation by this Company on the basis of excess, contributing, deficiency, concurrent, or double insurance or otherwise.

8. The term of coverage under the Hull Policy was from July 24, 1972, through December 24, 1972. The term of coverage for the Protection & Indemnity Policy was from July 24, 1972 through January 24, 1973. A premium of \$11,990 was paid by Hersent to Continental with respect to the Hull Policy and a premium of \$17,785.80 was paid by Hersent to Continental with respect to the P & I Policy.

9. At the time that the Hull Policy became effective, Barge #136 was in port of Carteret, New Jersey, and

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before leaving that port, it was surveyed by a firm called Hull & Cargo Surveyors, Inc. (hereinafter "HCS"). The HCS survey was required by Continental. Hersent warranted, among other things, the performance of the survey by HCS in Endorsement No. 1 of the Hull Policy. Endorsement No. 1 reads in full, "Warranted by the assured that the towing vessel, method of tow, the installation of crane and Miscellaneous Equipment, along with permission for vessel to proceed, will be approved and granted by Hull & Cargo Surveyors, Inc."

10. HCS is a wholly-owned subsidiary of Marine Office Appleton & Cox, which is a wholly-owned subsidiary of Continental.

11. The warranty contained in Endorsement No. 1 of the Hull Policy was fully complied with by Hersent. HCS conducted the required surveys and reported its findings to Continental.

12. The intended service of Barge #136 and of the crane and Miscellaneous Equipment aboard Barge #136 was utilization in the construction of an offshore platform off Jacobs Point, Long Island. The platform was to be used for unloading oil from tankers into pipelines for conveyance to onshore tanks at Jacobs Point.

13. On or about August 3, 1972, the day before Barge #136 left Carteret, New Jersey, to go to its work site and begin construction activity, it was fit for its intended service.

14. As of the effective date of the Hull Policy Barge #136 was fit for its intended service.

15. Barge #136, when inspected by Captain Smith and Mr. Brush, both of HCS, on June 30, July 31 and August 3, 1972, was found to be adequate for its intended service.

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16. By established standards for deck-cargo barges, the static stability of Barge #136 was well in excess of requirements.

17. In the month of December of 1972 Barge #136 capsized in eastern Long Island Sound while moored a little more than a mile off Jacobs Point, Long Island. The afore-said Crawler Crane and certain Miscellaneous Equipment were aboard Barge #136 at the time of the capsizing.

18. Robert J. Green was the Hersent employee who was the superintendent in charge of the entire project and the project included the use of Barge #136. Mr. Green had supervised similar construction work for Hersent and DeLong for about twenty years. His duties required his presence on Barge #136 on a daily basis when Barge #136 was being worked, which was normally a five-day week.

19. As project manager for Hersent at the Northville Industries job site, Mr. Robert J. Green's responsibilities included the scheduling and coordination of the construction of the terminal, as specified in the pertinent specifications and drawings. In this capacity he advised the personnel of the tug Paumanok, the crew boat Tracy Miller, the Wayzoff and Barge #136 where they were to be working at a specific time. Mr. Green was also responsible for the shoreside aspects of the project.

20. The dock builders did the rigging and welding work, and the engineers ran the equipment at the construction site. This equipment included such things as the crane, two winches, an air hammer, a diesel hammer, a compressor, and a generator.

21. Mr. Joseph Miller was Hersent's project coordinator and assistant controller at the Northville Industries project. He was the site manager. Mr. Robert Green shared an office with him at the Northville Industries plant.

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22. Mr. Frank Carr was the dock-builder foreman on the project. His duties included the allocation of work, seeing to it that the work was properly performed and informing his men whether to report to work on Saturdays. His other duties included the direction of welding operations, lashing procedures, dewatering operations, towing operations aboard Barge #136 when it was being towed, giving hand signals to the crane operator and the direction of the operations of the winches. In all of these operations, he was subject to the supervision and overall instructions of the project superintendent, Mr. Green.

23. Barge #136 was moored at its work site, in eastern Long Island Sound, a little more than one mile off Jacobs Point, in August of 1972, and continued to be moored in that location until the capsized, with the exception of occasional trips to Mattituck Inlet. It was returned to the construction site last on December 4, 1972. The crawler crane and the Miscellaneous Equipment were on board Barge #136 on December 15, 1972, when Barge #136 was last manned.

24. When Barge #136 and the crane first came to the construction site in the late summer of 1972, the length of the crane's boom was 160 feet. At some time thereafter it was lengthened to 170 feet, at Mattituck Inlet. Prior to the lengthening of the boom, there had been a method utilized for securing it into the boom crotch by means of a bridle arrangement. This method was not utilized after the ten-foot section was added, because the addition made the previous securing arrangement unfeasible. No bridles or guy wires were used to secure the boom before the crew departed Barge #136 on Friday, December 15.

24A. The boom had attached to it wires ("main fall") and a block, the latter of which was a heavy object attached to the end of the main fall. The block and a portion of the main fall were placed in a box-like container

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on the deck of Barge #136 when the boom was lowered into the cradle and, in fact, were in that container when the crew left Barge #136 on the morning of Friday, December 15. This arrangement constituted some additional impediment to the swinging of the boom.

24B. In June, 1972, through a survey report of HCS, Continental knew that there was a possibility that the boom might be extended from 160 feet to 170 feet, as in fact it later was. The extension of the boom *per se* did not render Barge #136 unfit for the purpose for which it was intended.

25. The forecast for the weekend during which Barge #136 capsized did not speak of either a hurricane or northeast storm. The phrase "northeast storm" is not used in weather forecasts. The storm which in fact occurred was not a typical northeast storm in that it had in its early stages two low-pressure centers, one of which was inland and west of the Appalachian Mountains. Moreover, by the time the eastern offshore low-pressure center became dominant it was virtually at the latitude of Long Island Sound, with the result that winds from the northeast, normally encountered in the early stages of a northeast storm, were not experienced for an extended period at any great velocity.

However, by the night of December 15, and the morning of December 16, the offshore low-pressure center had become dominant. A gale condition existed and although the winds at that point shifted around to the northwest, and continued from the northwest for the next 36 to 48 hours, the storm was essentially a northeast storm, as that phrase is customarily used. That is, a storm moving up the eastern seaboard with a low-pressure center offshore and cyclonic winds surrounding the low-pressure center.

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26. The crew left Barge #136 at about 9:45 a.m. on Friday, December 15, 1972, when strong winds and rough seas made their continued presence on Barge #136 unfeasible and possibly hazardous. Before leaving, the crane operator, Andrew Voltmann, lowered the boom between the 12-inch and 18-inch high welded steel uprights on the sides of the cradle and engaged the crane's house-lock and swing brake. When the boom was recovered after the capsized there was no visible damage observable.

27. When the crew left Barge #136 on the morning of Friday, December 15, it was moored with its southerly to southeasterly mooring lines crossed and its northerly to northwesterly lines breasted. The southerly to southeasterly mooring lines were approximately 100 to 150 feet in length, and the northerly to northwesterly mooring lines were approximately 1,000 feet in length.

28. The manner of mooring Barge #136 described in Finding of Fact #27 is common and reasonable for a construction barge when actually in use and it is not uncommon for construction barges to be left so moored when the vessel is not manned.

29. On December 14 and December 15, 1972, Barge #136 was moored south of the platform it was constructing by use of four 1-1/8 inch wires, three leading from the barge's corners to mooring buoys anchored by 30-ton concrete blocks and one leading from the fourth corner to an anchor. The anchor, which was generally to the northeast, was a 3-1/2-ton Navy anchor. The northwesterly line cable ran between pilings at the construction site with about nine feet of clearance between the cable and the pilings.

29A. The two winches were mounted on the port and starboard side of Barge #136, between the crane and the trailer office. With these two diesel-powered double-

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drum winches, the mooring wires which led off Barge #136 through the fairleads could be hauled in or paid out by individuals aboard Barge #136. On each drum of the winches there was approximately 1400 feet of wire.

30. Water had been pumped out of Barge #136 on occasions prior to the capsizing and some minor dewatering of various compartments had been accomplished on Thursday, December 14. Mr. Green, the superintendent of the project, testified that he checked all of the water-tight fittings and found that they had all been closed following this process.

31. On December 15, 1972, when the crew left Barge #136, it was moored on an approximate north-south axis.

32. On the morning of Friday, December 15, the meta-centric height of Barge #136, and its load, was such that it was ample for stability and would have met United States Coast Guard requirements.

33. Before the crew was taken off Barge #136 on the morning of Friday, December 15, they welded pad eyes to the barge and secured some of the equipment with cable.

34. At the time that the entire crew was removed from Barge #136 on Friday, December 15—such removal occurring at 9:45 a.m.—the wires leading from the barge to the northeast and to the northwest each had a length of approximately 1,000 feet. The wire from the southwesterly corner of Barge #136 had a length of approximately 150 feet, and the wire from the southeasterly corner of the barge had a length of approximately 100 feet. The southerly lines were crossed in such a manner that the one attached to the southwest corner of Barge #136 led out southeasterly and the one attached to southeast corner of Barge #136 led southwesterly.

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35. At the time that the crew was taken off Barge #136, on Friday, December 15, at 9:45 a.m., the wind was from the east and blowing at about 20 knots.

36. No change was made in the arrangement of the mooring lines in order to permit Barge #136 to swing into the wind and waves with greater ease.

37. Heavy weather having been expected, the watertight compartments on the barge were closed.

38. After departing from Barge #136 on Friday morning, December 15, the crew did not return to Barge #136 prior to its capsizing.

39. After the crew left Barge #136 on Friday, December 15, the National Weather Service, at 11 a.m., predicted "Small craft warnings changed to gale warnings at 11 a.m. Northeast to east increasing to 30 to 40 knots with higher gusts later this afternoon and tonight. Northwestern winds 20 to 30 knots with higher gusts Saturday."

40. Hersent supplied the crew for the tug Paumanok and the crew boat Tracy Miller. The Tracy Miller was used to transport the workers between the dock and Mattituck Inlet and the offshore job site. The Paumanok was the attending tug for the work project.

41. On Sunday, December 17, the crew of the Tug Paumanok was not aboard the Paumanok.

42. The crew boat Tracy Miller could have maneuvered its way out to Barge #136 on Friday afternoon as easily as could the tug Paumanok. There is no evidence in the record, however, upon which any finding can be predicated with respect to the question of whether the crew could have gotten back aboard Barge #136 at that time.

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43. On Friday, December 15, between the hours of 7 A.M. and 2:30 P.M., and on Saturday, December 16, between the hours of 7 A.M. and at least 3 P.M., Captain Wildner, the captain of the tugboat Paumanok, was on a stand-by alert at the instruction of Mr. Green. Captain Wildner viewed Barge #136 from the shore with binoculars between 3 P.M. and 4 P.M. on Saturday, December 16. At that time, in the opinion of Captain Wildner, Barge #136 was riding the weather very well. There was not much movement and Barge #136 was riding the way the sea was riding, which was north to northwest. The boom was not swinging around.

On Saturday, December 16, Captain Wildner had one and possibly two telephone conversations with Mr. Green. One such conversation occurred in the afternoon following Captain Wildner's viewing of Barge #136. He informed Mr. Green that Barge #136 was in good condition at that time.

44. Between 5 P.M. on Saturday, December 16, 1972, and 8 A.M. on Sunday, December 17, 1972, Barge #136 capsized while moored at its work site.

45. Each party called as an expert witness a consultant well qualified in the fields of naval architecture and marine engineering. Each of them held a Bachelor of Science degree from Massachusetts Institute of Technology. For Continental the expert witness was Mr. Henry M. Tiedmann; for Hersent it was Mr. Avrum A. Freelund.

46. Barge #136 capsized as a result of a combination of three major factors:

(a) a storm of gale proportions;

(b) the taking on of water along one side which caused it to list rather severely; and

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(c) the sliding of the crane and boom toward the listing side of Barge #136.

The foregoing three factors were somewhat interrelated. The taking on of water was due in great part to the storm. The sliding of the crane and boom was caused by the storm and the list, which resulted from the taking on of water. All three of the foregoing items in combination caused the capsize.

47. Since Barge #136 was found in a semi-submerged condition, and since its hull was watertight, it appears that the barge must have taken in substantial amounts of water before it capsized. The fact that Barge #136, after capsize, was found to be riding so low in the water, indicates that there had been substantial or significant pre-capsize flooding.

48. The four-point mooring arrangement limited the extent to which Barge #136 could swing into the wind and may have caused additional water to come aboard topside as the waves generated by the gale winds from the northeast and then the northwest made contact with the vessel.

49. Barge #136 had eighteen watertight compartments and two smaller fuel-oil compartments. Partial flooding of one or more of these compartments presented the threat of dynamic free surface effect. Free surface is an element in the reduction of overall stability. It does not appear that dynamic free surface effect was a causative factor in the capsize, but whatever list static free surface effect put on Barge #136 accentuated the off center weight.

50. The amount of water that could have been admitted to the below-deck compartments of Barge #136, during the capsize, was very insignificant. The word "capsize", in this context, means the short period during which the

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barge continued to roll over after the righting moment had ceased to exert a controlling force on the barge's stability.

51. Mr. Green's actions in leaving the vessel moored as it was on Friday, December 15, was imprudent from a seaman's standpoint. However, while the mooring arrangement may have aggravated the situation, there is no evidence to establish that it was a competent producing cause, or an immediate cause of the capsizing of Barge #136, although it might have expedited the occurrence.

52. The failure to slacken the mooring lines prior to the crew's departure on Friday, December 15, 1972, was the responsibility of Robert J. Green, who was present on Barge #136 throughout the working day of December 14, 1972, and the morning of Friday, December 15, 1972.

53. On Saturday, December 16, 1972, Robert J. Green, who was not present on the scene, but who had conditions relayed to him by one or two telephone messages from the captain of the tug Paumanok, did not consider it necessary to dispatch a tug to bring Barge #136 in, or for any other purpose.

54. The tug Paumanok could have departed Mattituck Inlet on Friday, December 15, after the tug captain had become apprised of the gale warnings, with winds north-east to east, which had been issued by the National Weather Service as of 11 A.M. It would have been feasible to bring the tug alongside Barge #136 at that time. The tug could also have hung at the mooring in the vicinity of Barge #136 throughout Friday afternoon. The tug's captain, Captain Wildner, testified that he would not have left it there unmanned at night.

55. On December 19, 1972, the diver, Mr. Robert Miller, accompanied by another diver in his underwater contracting business, dove under the overturned Barge #136 to

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make an inspection and to determine, if possible, the cause of the capsize. The diver's initial report included findings that one hatch cover was missing, that another was hanging on a chain and that four hatch covers were loose by only 1/4 of an inch.

56. When Barge #136 was observed on December 19, after the capsize, what had been the northwesterly corner of Barge #136 before the capsize was down and about one-half of the bottom of Barge #136 was awash.

57. On March 19, 1973, Continental commenced this action (as amended) under the Federal Declaratory Judgment Act (28 U.S. Code §2201) seeking a judgment declaring that it is not obligated to defendant under the Hull Policy nor under the Protection and Indemnity Policy in connection with the capsizing of Barge #136. Hersent, on the other hand, has claimed for recovery (by way of counterclaims) under each policy of marine insurance.

CONCLUSIONS OF LAW

1. The Court has jurisdiction of this action under 28 U. S. C. §1333.
2. The Hull Policy was in effect at the time of the capsize of barge number 136.
3. The burden of proof is on the insured—Hersent, in this case—to show that a loss arose from a covered peril.
4. It is a prerequisite to liability of the underwriter under either the general perils clause or the Inchmaree clause that the loss be proximately caused by the peril insured against.
5. The burden of proof set forth in Conclusion 3 was met by Hersent. The storm was the initiating and competent producing cause of the capsize of barge 136 and of the loss of the crane and equipment.

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6. The purpose of the Inchmaree clause in a maritime insurance policy is to broaden, not restrict, to expand, not withdraw coverage. The due diligence clause of the Inchmaree clause does not limit the coverage under the perils of the sea clause.

7. The Inchmaree clause was designed to insure against seagoing or operational negligence of the master (whether or not he is also the charterer or owner), and to exclude from coverage damage due to the shoreside failure of the shipowner's managerial staff properly to prepare or equip the vessel for the voyage or service she is about to perform.

8. Robert J. Green occupied the position of master of barge number 136 while aboard the barge, within the meaning of the Inchmaree clause of the Hull Policy. To the extent that he failed to take any additional affirmative action after leaving the vessel on Friday, December 15th, such failure is also within and governed by the Inchmaree clause.

9. What constitutes "due diligence" under the "Inchmaree" clause must be measured in light of the facts and circumstances of the particular case which brings the term into question.

10. With respect to Condition B of the Storm and Heavy Weather Plan of the Hull Policy; the phrase "well offshore" is ambiguous; if, however, it refers to the pressure center of the eastern segment of the storm, then the storm was "well offshore." The "heavy swells" did not occur, both because the storm didn't begin as a northeaster, and because Jacobs Point, where barge number 136 was moored, is somewhat sheltered by the neck of Long Island that runs to the northeast. The northeast storm, to the extent that it existed during the weekend of December 15 through December 17, 1972 was not "quite

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severe" within the meaning of subparagraph 1 of Condition B; therefore, there was no breach of subparagraph B 1 by Hersent. In addition, the crane boom was "lowered, cradled, and secured in place" (albeit not lashed in place; if the word "secured" was meant to mean lashed, or secured by the boom fall, the policy should have so stated); therefore, for a second and independent reason, subparagraph 1 of Condition B was complied with by Hersent.

11. With respect to subparagraph 2 of Condition B, the "gear and equipment on deck" was "secured against movement," so that Hersent complied with this provision.

12. Subparagraph 3 of Condition B is extremely ambiguous. It refers to "aft mooring lines." It is unclear which were the fore and the aft ends of barge number 136. It was obviously more essential that the mooring lines leading to the north—toward the construction site—be slacked off than it was that the lines leading toward shore be slacked off, because the barge could not swing unless the mooring lines toward the construction site were slacked off. If that be the interpretation given to "aft mooring lines," then Hersent complied by slacking them off. Moreover the phrase "if possible, vessel will be allowed to ride headline moorings and anchor with fairly equal strain on each unit" is not a warranty; it is not even a condition—merely a desired result. In any event, Hersent complied with the direction in this subparagraph.

13. With respect to subparagraph 4 of Condition B: subparagraph 4 is not a warranty; at most, in light of the nebulous language of the clause, it is a condition. However, even if subparagraph B 4 does constitute a warranty, it was complied with by Hersent, at least until barge number 136 had capsized. An alert was given to have the tug Paumanok stand by, and it did stand by up until 3:00 p.m. on Saturday. Although no alert was

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given to have the Paumanok stand by on Sunday, the barge number 136 had capsized by early Sunday morning.

14. Even if the language of the Storm and Heavy Weather Plan of the Hull Policy is sufficiently definite to constitute a set of warranties, the provisions of the Plan must be construed strictly against Continental, the underwriter; this is especially true as the Hull Policy was a time policy.

15. The one clear and unequivocal warranty in the Storm and Heavy Weather Plan was the requirement that Hersent appoint a person to make judgment that proper procedures were followed. Such an appointment was made by Hersent—that of Robert J. Green.

16. If Robert J. Green acted negligently with respect to compliance with the conditions of the Storm and Heavy Weather Plan, then Hersent is protected against his negligence under the Inchmaree clause of the Hull Policy.

17. In arriving at the meaning of the terms of an insurance policy relating to a vessel, one must keep in mind the kind of vessel insured, the voyage contemplated, and the nature of the risk assumed.

18. In New York the literal performance rule is followed with respect to warranties in marine insurance policies.

19. It is settled that a warranty in a contract of insurance must be literally complied with; that the only question in such cases is whether the thing warranted to be performed was or was not performed, and that a breach of the warranty releases the company from liability regardless of the fact that a compliance with the warranty would not have avoided the loss.

20. The proximate cause of a loss, within the meaning of maritime insurance contracts, means the dominant and effective cause producing a loss, or that cause which was most nearly and essentially connected with the loss as its

*Findings of Fact and Conclusions of Law, Filed
January 6, 1977*

efficient cause. In this instance, the proximate cause was the storm, which was a peril included in the perils of the sea clause.

21. Continental has not met its burden of proving any exceptions to coverage under the Hull Policy.

22. Hersent undertook lawful and necessary efforts, following the capsizing, to safeguard and recover barge number 136, the crane and the miscellaneous equipment on the barge.

23. After the capsizing of the barge number 136 the conduct of Continental and its agents was not such as to bring about a waiver of any of its defenses, or to estop it from asserting them.

24. Continental is liable to Hersent for losses covered by the Hull Policy only.

So Ordered.

Dated: New York, New York
January 5, 1977

GERARD L. GOETTEL
U.S.D.J.

Interlocutory Judgment, Filed January 19, 1977.

(Document No. 48)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

This action having come on for trial before the Court, Honorable Gerard L. Goettel, District Judge, presiding, and the parties having stipulated to try the issues of liability first and to reserve the issue of damages, and the Court having "So Ordered" Findings of Fact and Conclusions of Law filed January 6, 1977 on the issue of liability following a trial of said issue, and there being no just reason for delay of entry of the judgment, pursuant to Rule 54 (b) of the F. R. Civ. P.,

It is ORDERED, ADJUDGED and DECREED under Rule 52 (b) of the Federal Rules of Civil Procedure that

The action of the plaintiff, The Continental Insurance Company, for a declaratory judgment, is denied on the merits; and

The plaintiff, The Continental Insurance Company, is liable to the defendant, Hersent Offshore, Inc., for losses covered by the Hull Policy No. HC 01 27 81; and

The action of the defendant, Hersent Offshore, Inc., for recovery under the Protection and Indemnity Policy No. P&I C-72124 is denied on the merits.

Dated at New York, New York, this 19th day of January, 1977.

GERARD L. GOETTEL
U. S. D. J.

Judgment Entered—1/20/77
Raymond F. Burghardt
Clerk

Motion by Plaintiff, Filed January 18, 1977, for Amendment of Findings and for Judgment (with Supporting Memorandum).

(Document No. 47)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

SIRS:

PLEASE TAKE NOTICE that, upon the annexed Memorandum of Law dated January 17, 1977, the undersigned will move this Court before the Honorable Gerard L. Goettel, U.S. D.J., at 10:00 a.m., Monday, January 31, 1977, in Room 906 at the United States Courthouse, Foley Square, New York, New York, for an order directing that the "Findings of Fact and Conclusions of Law" and order (and any judgment entered thereon) herein dated January 5, 1977 finding plaintiff liable to defendant, be amended so that judgment be entered in favor of plaintiff rather than defendant.

This motion is made pursuant to Rule No. 52(b) of the Federal Rules of Civil Procedure and Rule 9 of this Court's General Rules.

Dated: New York, New York
January 17, 1977

STATEMENT

This case was tried to the Court during October 12-18, 1976 and on January 5, 1977 Findings of Fact and Conclusions of Law were "so ordered", The Continental Insurance Company having been thereby found liable to Hersent Offshore, Inc. under a certain marine hull insur-

Motion by Plaintiff, Filed January 18, 1977, for Amendment of Findings and for Judgment (with Supporting Memorandum)

ance policy. This motion, made pursuant to Rule 52(b) of the Federal Rules of Civil Procedure, seeks amendment of certain findings of fact and the making of additional findings. It also seeks entry of judgment in favor of plaintiff which commenced this declaratory judgment action praying for a judgment declaring that it is not obligated to defendant under the marine hull insurance policy involved.

Finding of Fact No. 6

After the first sentence, Continental requests that the following additional sentence be inserted as an additional finding:

“In the preamble to the Plan, it was stated that it was ‘warranted’ by the Assured that all of the ‘conditions’ set forth in the Plan would be strictly adhered to and complied with.”

See Defendant’s Exhibit “A”.

Finding of Fact No. 22

The last sentence is totally unsupported in the trial evidence. There is no proof that Green “supervised” or gave “overall instructions” to Carr with respect to welding, lashing, dewatering, towing, giving of hand signals to the crane operator or the operation of the winches. (Doyle testimony, pp 628-629). The only testimony on this point is that Green was project superintendent and in that capacity gave “orders” to Carr. Hersent did not produce Green and offered no reason why he could not be produced.

This factual issue relates to the doctrine of *Allen N. Spooner & Son, Inc., v. Connecticut Fire Ins. Co.*, 314 F. 2d 753 (2nd Cir. 1963). See Conclusion of Law No. 7.

Motion by Plaintiff, Filed January 18, 1977, for Amendment of Findings and for Judgment (with Supporting Memorandum)

Finding of Fact No. 27

Continental requests that the following sentence be added at the end:

“By use of the winches aboard the barge, the mooring lines had been drawn tight and then the locking dogs on the winches had been set.”

See: Green first deposition p. 22; Doyle testimony, pp. 634-635.

Finding of Fact No. 34

In the alternative, Continental requests that the sentence suggested above be added at the end of this Finding.

Finding of Fact No. 36

In the light of the requests under “27” and “34” above, Continental requests that the words “with greater ease” be stricken at the end of Finding of Fact No. 36.

Finding of Fact No. 37

Continental requests that the word “most” be substituted for “the” before “watertight”. (See Finding of Fact No. 46[b] and 47 with which the present phraseology appears to be inconsistent).

Finding of Fact No. 42

Continental asks that the last sentence be stricken. See Wildner testimony, pp. 652, 663-664, 666-667, 684.

Motion by Plaintiff, Filed January 18, 1977, for Amendment of Findings and for Judgment (with Supporting Memorandum)

Finding of Fact No. 48

Continental requests that "prevented Barge #136 from swinging" be substituted for "limited the extent to which Barge #136 could swing".

See Continental's requested change under "27" above.

Finding of Fact No. 52

Continental can find no evidentiary support for this finding (as it pertains to Green's "responsibility") and asks that it be stricken. See Doyle testimony, pp. 628-629.

Conclusion of Law No. 5

Continental contends that the storm was not of such force (considering the geographical location and the time of year involved) as to constitute a "peril of the sea". See Continental's F. R. Civ. P. No. 41(b) motion made at trial transcript pp. 177-186. Also see: *The Xantho*, [1887] 12 App. Cas. 503, 509.

Conclusion of Law No. 8

Continental requests that this be stricken (and also number "16" *infra*) as lacking any evidentiary basis. See Doyle testimony, pp. 628-629.

Conclusion of Law No. 10

Captain Wildner testified (at p. 686):

"The wind comes from the east and carries it out from the ocean less down through the Sound and you get quite a swell rolling".

Motion by Plaintiff, Filed January 18, 1977, for Amendment of Findings and for Judgment (with Supporting Memorandum)

Continental requests that the sentence on page 21 of the decision having to do with "heavy swells" be modified to state that: "The 'heavy swells' did occur".

Conclusion of Law No. 20

In the light of Continental's position taken under Conclusion of Law No. 5 above, Continental requests that the last sentence be stricken.

CONCLUSION

Upon the trial evidence, as highlighted above, Continental respectfully asks the Court to conclude that Hersent, the assured, has failed to show that the loss arose from a covered peril; and that Continental, the insurer, has met its burden of proving one or more of its defenses.

Defendant's Memorandum of Fact and Law, Filed January 31, 1977, Opposing Plaintiff's Rule 52(b) Motion.

(Document No. 49)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

Introduction

This memorandum is submitted in opposition to plaintiff's motion under FRCP Rule 52 (b). Defendant submits that plaintiff's motion is completely without merit. There was extensive colloquy and argument before the Court when the Findings and Conclusions were made and that was followed by additional argument and correspondence after the proposed Findings and Conclusions were submitted. Plaintiff's motion advances no new legal or factual arguments and thus fails to support its claim for the relief requested. Furthermore, we submit that this preposterous motion is an insult to the Court, and a waste of time, typical of plaintiff's dilatory actions throughout this case. When the final version of the Findings and Conclusions was submitted plaintiff *consented* to its being signed. Therefore, plaintiff is precluded from this attempt at further modification amounting, in effect, to a request for a reversal.

Finding of Fact No. 6

This addition is unnecessary at best and misleading at worst. If it merely attempts to restate the language in the Plan it is unnecessary because the Plan is in evidence and can be plainly read in full by an appellate court. It is misleading because the Court found and that

Defendant's Memorandum of Fact and Law, Filed January 31, 1977 Opposing Plaintiff's Rule 52(b) Motion

a number of so-called warranties in the Plan were not warranties but conditions (e. g., see Conclusion 13) and that one was not even a condition, "merely a desired result" (Conclusion 12). Consequently, specific inclusion of the requested words would create the appearance of a contradiction.

Finding of Fact No. 22

The sentence objected to is fully supported by the trial evidence. The citation to Doyle's testimony is of no weight because he was not highly placed enough to know the true hierarchy of authority and supervision beyond his immediate superior, Frank Carr. Carr's deposition testimony, however, shows that he was a conduit through which Green's orders were conveyed. At page 5, lines 10 through 17 and page 6, line 2, the deposition reads:

Q. Who was the superintendent? A. Robert Green.

Q. Did he work under your direction or did you work under his direction? A. I worked under his direction.

Q. What was Mr. Green's position in December 1972, to the best of your knowledge? A. Superintendent of construction.

Q. Was there anyone on the site and employed by Hersent who supervised Mr. Green to your knowledge? A. No one on the barge.

Q. Do you distinguish as being on the barge from being on shore? A. Yes.

Q. Who was somebody on shore who supervised Mr. Green to your knowledge? A. I can't answer that—

Defendant's Memorandum of Fact and Law, Filed January 31, 1977 Opposing Plaintiff's Rule 52(b) Motion

At page 22, lines 8 through 17, the deposition reads:

Q. Now, you told us that you worked on some Saturdays, and you didn't on other Saturdays: is that correct? A. Yes.

Q. Who gave you the orders to work or not work on Saturday? A. Bob Green.

Q. And who was to tell the men who worked for you whether they were to report on a Saturday for work? A. I would.

Finally, at page 23, lines 14 through 25 and the first line on page 24, the deposition reads:

Q. Who was with you when you went out onto the barge on Friday? A. The whole crew was there.

Q. Did that include Mr. Green? A. Yes. He was there.

Q. Approximately, how long a time did you spend on the barge on Friday? A. I believe we spent a half a day or morning on the barge.

Q. Some time during the morning, you departed? A. Yes.

Q. Who gave you the direction to depart the barge? A. Mr. Green.

The inability to produce Green was adequately explained. He was no longer an employee of Hersent, he was no longer within the State of New York and he was beyond the reach of subpoena and the control of defendant.

Finding of Fact Nos. 27 and 34

The addition requested is incomplete since the mooring lines heading north were slacked off (see Conclusion of Law Number 12) although those heading south may not have been. The request should be denied.

Defendant's Memorandum of Fact and Law, Filed January 31, 1977 Opposing Plaintiff's Rule 52(b) Motion

Finding of Fact No. 36

In light of Hersent's objections under "27" and "34", above, this request should be denied.

Finding of Fact No. 37

There is no inconsistency whatsoever. Findings 46(b) and 47 only indicate the something happened to break the watertight seal, such as wave action that loosened the hatch covers. The request should be denied.

Finding of Fact No. 42

The pages cited do not support the request to strike. The citations show only that Captain Wildner may have been able to maneuver his tug out to the barge on Friday. There is no support for the assertion that once out there he would have been able to get a crew on the barge. In fact, since there was extreme difficulty in getting the crew off the barge that morning, it is unreasonable to assume that by afternoon, when the weather had gotten worse, it would have been feasible to get them back on. The request should be denied.

Finding of Fact No. 48

The requested change is incorrect and would indicate that there was no swinging motion of the barge whatsoever, which is absurd particularly in view of the fact that there was some slackening of the north lines. The request should be denied.

Finding of Fact No. 52

This point is the same as that made above in regard to Finding 22 and Hersent's response is the same. The request should be denied.

Defendant's Memorandum of Fact and Law, Filed January 31, 1977 Opposing Plaintiff's Rule 52(b) Motion

Conclusion of Law No. 5

This argument was already rejected by the Court (see esp. pp. 180-183). The request should be denied.

Conclusion of Law No. 8

This point is the same as that made above in regard to Finding 22 and Herent's response is the same. The request should be denied.

Conclusions of Law No. 10

The requested change is without support. First, the weather experts testified that the real danger in the area is from northwest storms and the land blockage would inhibit the creation of swells. Second, the reference in Captain Wildner's testimony is to the area of the sand bar at Mattituck Inlet, not to the barge site. Third, even if we assume, contrary to the evidence, that heavy swells from east winds *could* occur at the barge site, there is no evidence to support plaintiff's request for a finding that they *did* occur. The request should be denied.

Conclusion of Law No. 20

The Court is respectfully referred to Hersent's response under Conclusion 5, above. The request should be denied.

CONCLUSION

The motion of plaintiff is devoid of merit and should be denied in its entirety, with costs and attorneys' fees in view of its frivolous character.

**Reply Affidavit on Behalf of Plaintiff, Filed February 7,
1977, Supporting Rule 52(b) Motion.**

(Document No. 50)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

W. SHELBY COATES, Jr., being duly sworn, deposes and says:

1. I was principal trial counsel (in a role as "of counsel" to Messrs. Macklin, Hanan & McKernan) for plaintiff at the October 12-18, 1976 non-jury trial of the above cause.

2. On January 17, 1977 plaintiff moved for an order directing that the "Findings of Fact and Conclusions of Law" and Order (and any judgment entered thereon) herein dated January 5, 1977, finding plaintiff liable to defendant, be amended so that judgment be entered in favor of plaintiff rather than defendant.

3. The *New York Law Journal* for Friday, January 28, 1977, listed the motion for:

"Oral argument Jan. 31, 1977, at 10 A.M., in Room 2703."

"Defendant's Memorandum of Fact and Law in Opposition to Motion" was received in the morning mail on the motion's return date and I attended in Court at 10:00 A.M. to orally argue the motion. Defendant's counsel did not appear—having thought that the motion was to be taken by the Court upon submission—and, as requested by defendant's counsel by telephone, I asked the Court for a short adjournment to permit oral argument by both sides. The Court granted plaintiff an opportunity to reply to defendant's answering papers and, this being plaintiff's

*Reply Affidavit on Behalf of Plaintiff, Filed February 7,
1977, Supporting Rule 52(b) Motion*

reply, it now appears that oral argument might be unnecessary and is not now requested on behalf of the plaintiff.

4. The "Introduction" to defendant's answering papers wrongfully states that plaintiff is "precluded" from making its FRCP No. 52(b) motion because plaintiff had "consented" to the signature by the Court of the set of Findings of Fact and Conclusions of Law that had been submitted to the Court under cover of defendant's counsel's letter to the Court dated January 4, 1977.

5. At the conclusion of the October trial the Court stated (at transcript pp. 790-791):

"What do you gentlemen think about having the prevailing party obtain the transcript and excerpt from it the actual findings made and the actual conclusions made and preparing a formal document to that effect?"

• • •

"I will suggest that you do that. You may eliminate explanatory matter where I explained why I make a ruling. You may correct obvious grammatical errors and inadvertent references to requests to charge when I mean findings, things of that nature, and submit the Findings and Conclusions to your adversary to have them review it, not for the purpose of rearguing all of this, but for the purposes of seeing that what you have produced accurately reflects what I have found and concluded. Then I will sign and enter them."

6. When first corresponding with defendant's counsel regarding defendant's proposed findings and conclusions, plaintiff's counsel's letter dated November 19, 1976 (with copy to the Court) had a penultimate paragraph reading:

*Reply Affidavit on Behalf of Plaintiff, Filed February 7,
1977, Supporting Rule 52(b) Motion*

"Where we have said 'no dispute' above, this is not meant to be taken in substantive context. (See trial transcript pp. 790-791)."

7. Defendant's counsel's letter to the Court dated January 4, 1977, which enclosed the final set of proposed findings and conclusions, contained the following acknowledgment in its last paragraph:

"Continental's attorneys have no objection to the form of the proposed Findings and Conclusions, although they of course disagree on the merits with a number of them. They wish their consent to your Honor's signing the enclosed to be without prejudice to their right to appeal."

In the light of what has been set forth above in paragraph "5" through "7" of this affidavit, deponent, on behalf of Continental, submits that defendant's counsels' attempt at preclusion is not at all fitting.

8. Continental's further comments regarding "Defendant's Memorandum of Fact and Law in Opposition to Motion" follow hereunder:

Finding of Fact No. 6

Attached hereto as Exhibit "A" to this affidavit is a copy of the "Storm and Heavy Weather Plan", including the preamble at the top.

Finding of Fact No. 22

Deponent submits that Robert Green's deposition could have been taken on the "Inchmaree" contentions, raised on the eve of trial, *de bene esse* at the instance of the party having the burden of proof, Hersent Offshore, Inc. See: "Historical Note" preceding 28 U. S. Code §1781.

*Reply Affidavit on Behalf of Plaintiff, Filed February 7,
1977, Supporting Rule 52(b) Motion*

Finding of Fact Nos. 27 and 34

Defendant ignores the citation to the trial transcript. (The Green deposition referred to by plaintiff was the first one which was taken on July 30, 1973).

Finding of Fact No. 36

No further comment.

Finding of Fact No. 37

* * *

After the capsizes, the diver found that some hatch covers were missing, some were hanging on chains, and some were loose. (Smith, trial transcript pp. 289-290). Deponent submits that the reasonable inference to be drawn is—considering the shape, size, and freeboard of the barge in question—that hatch covers were missing and loose before the capsizes, before the storm arrived, and at the time that the crew left the barge. If the hatch covers had been on and properly latched it is inconceivable that wave action in Long Island Sound could have loosened these hatch covers which were located on the barge's main deck.

Finding of Fact No. 42

The barge had a length of 135 feet, a breadth of 50 feet, and a depth of 11 feet. The lee side of the barge, which was to the west, was protected by the barge itself from whatever wave action had developed by Friday afternoon. At the time that the crew had been taken off the barge (9:45 a.m., Friday, December 15, 1972) the wind was from the east and blowing at about 20 knots. (FF No. 35). It would have been feasible to bring the tug Pau-manok alongside the barge on that Friday after the 11:00 a.m. gale warnings had been issued. (FF No. 54). The

*Reply Affidavit on Behalf of Plaintiff, Filed February 7,
1977, Supporting Rule 52(b) Motion*

crew boat Tracy Miller could have maneuvered its way out to the barge on Friday afternoon as easily as could the tug Paumanok. (FF No. 42).

Finding of Fact No. 48

As has been stated above, the lines were drawn tight. Hersent has not pointed to any contrary evidence in the record.

Finding of Fact No. 52

No further comment.

Conclusion of Law No. 5

No further comment.

Conclusion of Law No. 8

No further comment.

Conclusion of Law No. 10

No further comment.

Conclusion of Law No. 20

No further comment.

WHEREFORE, on behalf of plaintiff, The Continental Insurance Company, deponent respectfully prays that an amended judgment be granted in favor of the plaintiff.

s/ W. SHELBY COATES, JR.

Sworn to before me this
3rd day of February, 1977.

**Endorsement, Filed February 7, 1977, by Judge Goettel
on Plaintiff's Rule 52(b) Motion.**

(Document No. 47)

UNITED STATES DISTRICT COURT,

SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

ENDOSEMENT

The Continental Insurance Company v. Hersent Offshore, Inc., 73 Civ. 1158 (GLG)

Plaintiff has moved, pursuant to Rule 52(b) of the Federal Rules of Criminal Procedure, for an order amending the "Findings of Fact and Conclusions of Law" entered in this action. At the outset, the defendant challenged plaintiff's right to make such a motion at this time.

At the conclusion of a bench trial, Findings of Fact and Conclusions of Law were made on the record in open court. The parties were advised that they might, if they wished, submit formal written Findings of Fact and Conclusions. This was subsequently done, but there were substantial disagreements between the parties concerning the precise wording of various of the Findings and Conclusions which, in some instances, went beyond those made at the conclusion of trial. Ultimately, agreements were reached (or where no agreement could be reached the Court decided the dispute.) and, on January 6, 1977, the Findings of Fact and Conclusions of Law were entered. Of course, in agreeing to the form of these Findings and Conclusions, the plaintiff did not agree to their correctness and reserved its rights to appeal. To the extent that the instant motion seeks to challenge the sufficiency of evidence supporting the Findings, or to amend the judgment, it is proper, as if made under Rule 59(a) seeking a

*Endorsement, Filed February 7, 1977, by Judge Goettel on
Plaintiff's Rule 52(b) Motion*

new trial. However, to the extent that it merely seeks changes or additions which would not result in a new trial or an amended judgment, the motion would appear to be untimely.

All of the challenged Findings of Fact appear to fall within the area of insignificant changes and should have been raised earlier. In any event, none of the objections seem to have any merit, with one exception. Plaintiff objects to Finding of Fact No. 37 which states that: "Heavy weather having been expected, the watertight compartments on the barge were closed." They request that the word "most" be inserted instead of "the" before "watertight." Such a finding would be no more accurate than the present finding. The evidence established that, since heavy weather was expected, directions were given to close the watertight compartment hatches. Thereafter, and prior to the barge capsizing, certain of the watertight compartments were open. This could have occurred from any of the following causes:

- 1) A failure to close the watertight compartment.
- 2) A failure to close the watertight compartment properly so that it would remain closed regardless of the effect of motion or elements.
- 3) The movement of certain topside objects (such as machinery) breaking open the hatches to the watertight compartments.

There was inadequate evidence to conclude which of the foregoing was the cause of the watertight compartments flooding.

*Endorsement, Filed February 7, 1977, by Judge Goettel on
Plaintiff's Rule 52(b) Motion*

The requested changes in the Conclusions of Law could effect the ultimate judgment or at least one of the grounds on which it rests. However, the arguments made by the plaintiff were given extensive consideration during trial and no new evidence or authorities have been cited sufficient to result in the changing of any of these Conclusions. Consequently, the motion is denied in all respects.

So Ordered:

Dated: New York, N. Y.,
February 4, 1977.

GERARD L. GOETTEL
U. S. D. J.

Plaintiff's Notice of Appeal, Filed February 14, 1977.

(Document No. 51)

UNITED STATES DISTRICT COURT,

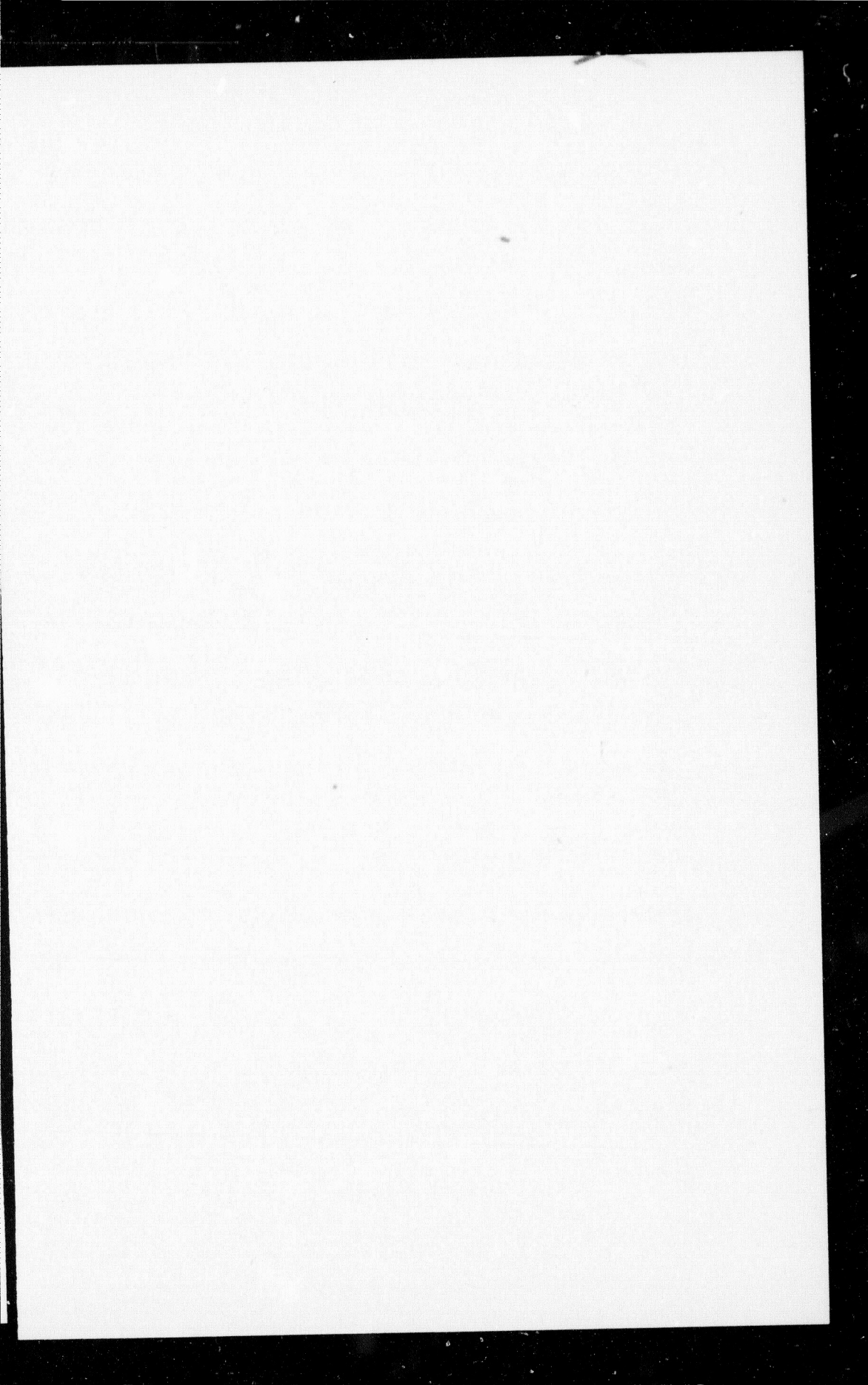
SOUTHERN DISTRICT OF NEW YORK.

[SAME TITLE.]

SIRS:

Notice is hereby given that plaintiff, The Continental Insurance Company, hereby appeals to the United States Court of Appeals for the Second Circuit from the Interlocutory Judgment dated January 19, 1977 and entered in this action on the 20th day of January, 1977; and said plaintiff also gives notice that it hereby appeals to the United States Court of Appeals for the Second Circuit from the Order dated February 4, 1977 and entered in this action on February 7, 1977.

Dated: New York, New York
February 14 1977.



COUNTY OF NEW YORK, ss:

Bernard S. Greenberg

deposes and says that he is over the age of 21 years and resides at 162 E. 7th St. N.Y., N.Y. being duly sworn,

That on the 12th day of May, 1977, upon he served the annexed Brief for Plaintiff-Appellant, Joint Appendix & Joint Exhibit Volume

Warner & Gillers, P.C.

Attorneys for Defendant-Appellee

500 Fifth Ave.

N.Y., N.Y. 10036

in this action, by delivering to and leaving with said attorneys 2 briefs, 2 joint appendix & 1 exhibit volume true copies to each thereof.

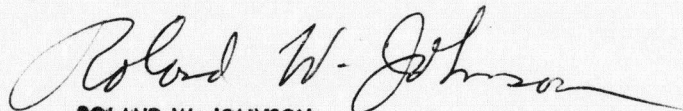
DEPONENT FURTHER SAYS, that he knew the persons so served as aforesaid to be the persons mentioned and described in the said action.

Deponent is not a party to the action.

Sworn to before me, this 12th

day of May, 1977 }

Bernard S. Greenberg



ROLAND W. JOHNSON
Notary Public, State of New York
No. 4302705

Qualified in Delaware County
Commission Expires March 30, 1979

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

THE CONTINENTAL INSURANCE COMPANY,
Plaintiff-Appellant,

against

HERSENT OFFSHORE, Inc.,
Defendant-Appellee.

AFFIDAVIT
OF SERVICE